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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

Proceeding	91200832		
Party	Defendant Honda Giken Kogyo Kabushiki Kaisha (Honda Motor Co., Ltd.)		
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Signature	/Shira Hoffman/		
Date	12/04/2015		
Attachments	2015-08-06 MIERITZ With Errata and signed cert_Redacted.pdf(4167715 bytes) EX 0017 Applicant James Mieritz Exhibit 082615.PDF(128081 bytes) EX 0021 Applicant James Mieritz Exhibit 082615.PDF(128169 bytes) EX 0023 Applicant James Mieritz Exhibit 082615.PDF(127922 bytes) EX 0024 Applicant James Mieritz Exhibit 082615.PDF(128117 bytes) EX 0041 Applicant James Mieritz Exhibit 082615.PDF(386664 bytes) EX 0042 Applicant James Mieritz Exhibit 082615.PDF(386664 bytes) EX 0043 Applicant James Mieritz Exhibit 082615.PDF(127944 bytes) EX 0044 Applicant James Mieritz Exhibit 082615.PDF(127794 bytes) EX 0045 Applicant James Mieritz Exhibit 082615.PDF(127957 bytes) EX 0046 Applicant James Mieritz Exhibit 082615.PDF(128252 bytes) EX 0047 Applicant James Mieritz Exhibit 082615.PDF(127742 bytes) EX 0048 Applicant James Mieritz Exhibit 082615.PDF(384680 bytes) EX 0049 Applicant James Mieritz Exhibit 082615.PDF(382371 bytes) EX 0050 Applicant James Mieritz Exhibit 082615.PDF(130488 bytes) EX 0051 Applicant James Mieritz Exhibit 082615.PDF(1034791 bytes) EX 0026 Opposer James Mieritz Exhibit 082615.PDF(1034791 bytes) EX 0027 Opposer James Mieritz Exhibit 082615.PDF(776227 bytes)		

[Page 1]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

BRIGGS & STRATTON CORPORATION and KOHLER CO.,

Opposers,

Opposition No. 91200832 (parent)

-vs-

Opposition No. 91200146

Application Serial No. 78924545

HONDA GIKEN KOGYO KABUSHIKI

KAISHA,

Applicant.

DEPOSITION OF JAMES MIERITZ

Wednesday, August 26, 2015 9:05 a.m.

Wilmer, Cutler, Pickering, Hale and Dorr LLP

60 State Street, Boston, MA 02109

Reported by:

JOB NO. 146810

Janet Sambataro, RMR, CRR, CLR

	[Page 2]
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3	
4	August 26, 2015
5	9:05 a.m.
6	
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8	
9	Deposition of JAMES MIERITZ, held at the
10	offices of Wilmer, Cutler, Pickering, Hale and
11	Dorr LLP, 60 State Street, Boston, Massachusetts,
12	pursuant to Agreement before Janet Sambataro, a
13	Registered Merit Reporter, Certified Realtime
14	Reporter, Certified LiveNote Reporter, and a
15	Notary Public within and for the Commonwealth of
16	Massachusetts.
17	
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25	

		[Page 3]
1	APPEARANCES:	
2	WILMER, CUTLER, PICKERING, HALE and DORR, LLP	
3	(By Sarah Frazier, Esquire,	
4	and Vinita Ferrera, Esquire)	
5	60 State Street	
6	Boston, Massachusetts 02109	
7	sarah.frazier@wilmerhale.com	
8	vinita.ferrera@wilmerhale.com	
9	Counsel for the Applicant	
10		
11	REED SMITH, LLP	
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13	101 Second Street, Suite 1800	
14	San Francisco, California 94105	
15	sherring@reedsmith.com	
16	Counsel for the Opposer Briggs & Stratton	
17		
18		
19	WHYTE HIRSCHBOECK DUDEK, S.C.	
20	(By Kenneth R. Nowakowski, Esquire)	
21	555 East Wells Street, Suite 1900	
22	Milwaukee, Wisconsin 53202-3819	
23	knowakowski@whdlaw.com	
24	Counsel for the Opposer, Kohler Co.	
25		
i		

	[Page 4]			
1	PROCEEDINGS			
2	JAMES MIERITZ,			
3	having been duly sworn, after presenting			
4	identification in the form of a driver's license,			
5	deposes and says as follows:			
6	DIRECT EXAMINATION			
7	BY MS. FRAZIER:			
8	Q. Good morning. Please state your name.			
9	A. Good morning. My name is James Thomas			
10	Mieritz, M-I-E-R-I-T-Z.			
11	Q. Where do you live?			
12	A. I live at 4315 Collingtree Drive,			
13	Rockledge, Florida 32955.			
14	Q. What is your educational background?			
15	A. I have a mechanical engineering degree,			
16	bachelor of science, and I also have a master's			
17	in business administration.			
18	Q. Prior to receiving your bachelor's			
19	degree, where did you work?			
20	A. I worked at Briggs & Stratton.			
21	Q. After receiving your bachelor's degree,			
22	where did you work?			
23	A. I worked at Briggs & Stratton			
24	Corporation.			
25	Q. In total, how long did you work for			

[Page 5]

- 1 Briggs & Stratton?
- A. In total, I've been affiliated with
- 3 them for over 40 years.
- 4 Q. During your more than 40 years at
- 5 Briggs & Stratton, what were some of the
- 6 positions that you held?
- 7 A. I held various positions, beginning
- 8 with draftsman, tool design, engine specification
- 9 writer, project design engineer, assistant chief
- 10 engineer, manager of large engines, manager of
- 11 Vanguard engines, and business manager of Asian
- 12 operations.
- Q. Are you aware that Briggs & Stratton is
- one of the parties opposing Honda's registration
- 15 in this case?
- 16 A. Yes, I am.
- Q. Do you have any current relationship
- 18 with Briggs & Stratton?
- 19 A. No. They just pay my pension.
- Q. Are you a member of any professional
- 21 organizations?
- 22 A. I'm a retired member of the Society of
- 23 Automotive Engineers.
- Q. What is the Society of Automotive
- 25 Engineers?

[Page 6]

- 1 A. The Society of Automotive Engineers is
- 2 a group of individuals in a technical
- 3 engine-related field. By that, I mean
- 4 automotive, large engines, racing engines, small
- 5 engines, anything related to engine and
- 6 technology of engines.
- 7 Q. How long were you a member of the
- 8 Society of Automotive Engineers?
- 9 A. I was a member for approximately 35
- 10 years.
- 11 Q. Did you hold any positions within the
- 12 Society of Automotive Engineers?
- 13 A. Yes. For 15 years, I was the chairman
- of the small engine committee.
- 15 (Resume of James T. Mieritz
- 16 marked Applicant's Exhibit 41.)
- 17 BY MS. FRAZIER:
- 18 Q. Mr. Mieritz, the court reporter just
- 19 handed you what's been marked as Applicant's
- 20 Exhibit 41.
- 21 Can you identify that document, please?
- 22 A. Yes. This is a resume of my work
- 23 experience.
- Q. Is this resume complete, as of today?
- A. Yes, it is.

[Page 7]

- Q. Were you hired by Honda in connection
- 2 with this case?
- 3 A. Yes, I was.
- Q. Are you being compensated by Honda for
- 5 your work on the case?
- A. Yes, I am.
- 7 Q. At what rate?
- 8 A. \$170 per hour for general reports,
- 9 history; and \$200 per hour for testimony in
- 10 depositions, plus expenses.
- 11 Q. Is your compensation in any way
- 12 dependent on the outcome of this case?
- 13 A. No, it isn't.
- 14 Q. You told us earlier about the positions
- you held during your four decades at Briggs.
- In any of those positions, did you gain
- 17 experience designing engine components?
- 18 A. Yes, I did.
- 19 Q. Could you describe that experience,
- 20 please?
- 21 A. Virtually all the time, in my early
- years, I worked on various engine components,
- 23 making change orders, drafting. Then when I was
- 24 hired as an engineer, I was a project design
- 25 engineer for the first seven years.

[Page 8]

- In those seven years, I was involved in the
- 2 design of virtually every component within the
- 3 engine, and that includes crankshaft, cam gear,
- 4 valve train, piston, connecting rods, rings,
- 5 cylinder, cylinder head, crank case cover,
- 6 muffler, fuel tank, air cleaner, elbows, plastic
- 7 components, rubber components, gaskets,
- 8 accessories added on the engine, rotating
- 9 screens, rewind starters, and hardware.
- 10 Q. Did you have any experience at Briggs
- 11 designing the external components of engines?
- 12 A. Yes, I did.
- 13 Q. Could you describe that experience,
- 14 please.
- 15 A. I've designed fuel tanks. I've
- designed air cleaners, air cleaner bases, fan
- 17 housings, rewinds, mufflers, accessory add-ons,
- high oil fill dip sticks, things of that nature.
- 19 Q. In any of your positions at Briggs, did
- you gain experience designing complete engines?
- 21 A. Yes, I did.
- Q. Could you describe that experience,
- 23 please?
- 24 A. In the mid '70s, Briggs & Stratton,
- which at that time was a manufacturer of

[Page 9]

- 1 single-cylinder engines, decided to enter into
- 2 the two-cylinder field.
- We decided to come up with an opposed twin
- 4 engine design. I was given that project to
- 5 completely design the engine, develop the engine,
- 6 test the engine, and bring it into production.
- 7 Q. Other than the opposed twin engine you
- 9 just described, did you have any other experience
- 9 designing complete engines while at Briggs?
- 10 A. Yes. There were two or three partial
- 11 redesigns. There was a 10-horsepower redesign, a
- 12 4-horsepower redesign, maybe even an 8-horsepower
- 13 redesign.
- 14 Then in the mid '80s, Briggs & Stratton
- wanted to enter the premium field of engines, and
- we looked at a 9-horsepower single-cylinder
- 17 overhead valve line of engines, horizontal shaft.
- 18 Q. While at Briggs & Stratton, did you
- 19 become familiar with the costs associated with
- 20 manufacturing engines?
- 21 A. Yes, I did.
- Q. Could you describe that familiarity?
- 23 A. In all aspects of Briggs & Stratton
- 24 engineering work, cost is upfront. Specifically,
- 25 we'll talk about the opposed twin. As I designed

[Page 10]

- and as we had components detailed on drawings,
- 2 those drawings would be submitted to our cost
- 3 estimator, who at that time would determine the
- 4 appropriate manufacturing cost or the purchase
- 5 cost. We would do this for all the components
- 6 within the engine.
- We developed a bill of materials of all the
- 8 engine component parts cost that gave us an
- 9 engine cost, and that way we could see if we met
- 10 the target specifications.
- 11 Q. Did you become familiar with any
- 12 competitor engines while you were at Briggs?
- 13 A. Yes.
- 14 Q. Which competitors?
- 15 A. We looked at Tecumseh, Kohler, Onan,
- 16 Wisconsin, Kawasaki, Honda, Robin engines,
- 17 various Chinese competitors also.
- 18 Q. You mentioned Honda. Were you familiar
- 19 with the Honda GX engine?
- 20 A. Yes, I am.
- 21 Q. Did any of the engines you personally
- 22 designed compete with the Honda GX engine?
- A. Yes. Yes, they did. The 9-horsepower
- 24 single-cylinder, overhead valve engine design of
- 25 Briggs & Stratton was in direct competition with

[Page 11]

- 1 the Honda GX engine.
- Q. Mr. Mieritz, I'm handing you what's
- 3 already been marked as Applicant's Exhibit 6.
- 4 MR. NOWAKOWSKI: I have so many copies.
- 5 Thank you.
- 6 Q. Do you recognize this document?
- 7 A. Yes, I do.
- Q. Could you tell us what it is, please.
- 9 A. This is a notice of publication of the
- proposed mark that Honda has applied for, for a two shown
- 11 trademark for the engine, show on the last page.
- 12 Q. What were you asked to do in connection
- 13 with this case?
- 14 A. I was asked to do two things; to
- 15 testify on how small engines are designed, and to
- 16 testify whether the overall appearance of the
- 17 Honda GX engine and the mark and the features
- 18 within the mark are functional or nonfunctional.
- 19 Q. Looking at the line drawing on the last
- 20 page of the application, what engine is depicted
- 21 in that line drawing?
- 22 A. It's a Honda GX engine, horizontal
- 23 shaft, overhead valve, slant cylinder.
- Q. What types of applications is the GX
- 25 engine used for?

[Page 12]

- A. This engine is used on compressors,
- 2 welders, generators, pumps, miscellaneous
- 3 agricultural equipment.
- 4 Q. You said you were asked to testify
- 5 regarding the process of small engine design.
- 6 Could you briefly describe how the process of
- 7 designing a small engine begins.
- 8 A. Sure. Briefly, after marketing and
- 9 sales have done their study and they come up with
- 10 a specification on the horsepower, I would
- 11 determine a bore and stroke and cubic inch
- 12 displacement that's required for that.
- I would come up with a cubic inch
- 14 displacement requirement for that horsepower
- 15 range. That cubic inch displacement is
- 16 calculated by the bore and stroke of the engine.
- 17 The bore and stroke can vary depending on the
- 18 size that you are looking for.
- 19 Once your bore and stroke is determined, I
- 20 would start from the inside out. So I'd have a
- 21 center line, where I'd have the crankshaft,
- 22 connecting rod, end piston, end bore, and
- 23 generate a complete rotation of the connecting
- 24 rod.
- I would add in the gear centers, which is

[Page 13]

- the cam gear and the valve train. I would work
- 2 my way upward using the valve train rocker arms,
- 3 add any internal components, such as the oil
- 4 system, governing system. Once I've had those
- 5 components, I can generate the outside perimeter
- 6 of the crank case cover.
- 7 Then I can start adding in cylinder fins,
- 8 any other detail that's necessary on the outside
- 9 of the cylinder, attach the cylinder head, attach
- 10 the crank case cover, and at that point I have
- 11 a -- what we call a short block, a power plant.
- 12 Q. Once you have the short block or power
- 13 plant, what comes next in the design process?
- 14 A. After the short block is completed, you
- 15 can add the external parts, which are flywheel,

rewind

- 16 fan, fan housing, or blower housing, realign
- 17 starter, fuel tank, muffler, air cleaner, air
- 18 cleaner base, controls, dipstick, accessories
- 19 that are added on to the engine.
- 20 Q. In your experience, who is involved in
- 21 designing the external components, such as the
- 22 fan cover, fuel tank, air cleaner cover?
- MR. NOWAKOWSKI: Objection.
- 24 A. Okay.
- 25 Q. In your experience, who is involved in

[Page 14]

- designing the external components that you just
- 2 described?
- 3 A. Originally, the designs are first
- 4 started by the design engineer. Then typically
- 5 we would have an industrial designer come in and
- 6 style the outside components for us.
- 7 Q. What was the practice at Briggs in
- 8 terms of interaction between the industrial
- 9 designers and the engineers?
- 10 A. We would bring in the industrial
- 11 designer and discuss with management what we were
- 12 trying to achieve in a look. They would then
- 13 take a mockup back or drawings back, come back to
- 14 us with three or four different renderings of
- 15 appearances, and we would continue the discussion
- 16 as to whether it was good or bad and sort out
- 17 what we wanted, investigate what parts might not
- be feasible to make in that particular design,
- 19 and make changes.
- Q. In your experience, was it common for
- 21 the industrial designers and engineers to
- 22 interact regularly when designing external
- 23 components?
- 24 MR. NOWAKOWSKI: Objection.
- 25 Foundation.

[Page 15]

- 1 BY MS. FRAZIER:
- Q. Mr. Mieritz, did you have experience at
- 3 Briggs interacting with industrial designers?
- 4 A. Yes, I did.
- 5 Q. And in your experience at Briggs, was
- 6 it common for you to interact with those
- 7 industrial designers regularly when designing
- 8 external components?
- 9 A. We worked with them typically when it
- 10 was a new engine design and it was requested that
- we come up with a look that Briggs & Stratton
- 12 wanted.
- 13 Q. In your experience, what was the
- 14 ultimate goal when working with the industrial
- 15 designers?
- MR. NOWAKOWSKI: Objection.
- 17 A. Ultimate goal was to provide a family
- 18 look. For instance, Vanguard engines were a
- 19 family of engines from 5 through 20 horsepower.
- Q. What did the term "family look" mean
- 21 when you were at Briggs & Stratton?
- 22 A. When I was at Briggs & Stratton, we --
- 23 Briggs & Stratton had three different types of
- engines; premium, which was a Vanguard, a
- 25 midrange, which at that time was Intek, and then

[Page 16]

- 1 a basic engine.
- The engines were differentiated by number of
- 3 hours running on endurance tests. Each
- 4 individual group wanted their own look, a family
- 5 look. So the Vanguard family was differentiated
- 6 from the Intek family. And that was
- 7 differentiated from the basic family.
- Q. Mr. Mieritz, you testified you were
- 9 asked to provide an opinion regarding whether or
- 10 not the mark in Honda's application is
- 11 functional. What definition of "functional" did
- 12 you apply when forming your opinion?
- 13 A. A part is functional when it
- 14 contributes to either the use or purpose of the
- part or product. And it can affect the cost and
- 16 quality.
- Q. Did you submit a declaration in support
- of Honda's trademark application?
- 19 A. Yes, I did.
- 20 (Declaration of James Mieritz
- 21 marked Applicant's Exhibit 42.)
- 22 BY MS. FRAZIER:
- Q. Mr. Mieritz, the court reporter has
- 24 just handed you what's been marked as Applicant's
- 25 Exhibit 42.

		[Page 17]			
1	A. Yes.				
2	Q. Do you recognize that document	ment?			
3	A. Yes, I do.				
4	Q. Could you tell us what it	is, please?			
5	A. This is a report I prepared	d in 2009,			
6	declaration for Honda's application for the				
7	trademark.				
8	Q. If you would turn, please,	to			
9	Paragraph 12 of the report.				
10	(Witness complies.)				
11	A. Okay.				
12	Q. Do you see where it states	, "I have			
13	been informed that a trademark that	is a			
14	three-dimensional configuration of a	product is			
15	functional if the configuration is ea	ssential to			
16	the use or purpose of the product or	if the			
17	feature affects the product cost or	quality.			
18	"I have been informed that" to	meet the			
19	legal test excuse me, "to meet the	e test of			
20	legal functionality, the product must	t be in a			
21	particular shape because it works be	tter in that			
22	shape or costs less in that shape."				
23	Do you see where it says that?				
24	A. Yes, I do.				
25	Q. Is that the definition of				

[Page 18] 1 "functionality" that you've applied? 2 Α. Yes, it is. 3 And if you'd turn, please, to Exhibit A Ο. to this declaration. 5 (Witness complies.) 6 Ο. Is the line drawing shown at Exhibit A 7 the mark you were opining about in this declaration? 8 Α. Yes, it is. 10 Is the mark shown at Exhibit A a Q. 11 two-dimensional mark or a three-dimensional mark? Exhibit A is a --12 Α. 13 MR. HERRING: Objection. 14 MS. FRAZIER: Counsel, what is the 15 basis for the objection? MR. HERRING: Lacks foundation. 16 17 Outside the scope of his expert report. Hearsay. 18 Mr. Mieritz, is the mark shown in Q. Exhibit A the same mark that you're testifying 19 20 about here today? 21 Yes, it is. Α. 22 Q. Is this a two-dimensional or a 23 three-dimensional mark? 24 MR. HERRING: Same objections.

25

MS. FRAZIER: You can answer.

[Page 19]

- 1 A. This is a two-dimensional.
- Q. Does your definition of "functional"
- 3 differ if the mark is two-dimensional versus
- 4 three-dimensional?
- 5 A. No, it doesn't.
- Q. Using the definition you just provided,
- 7 did you form an opinion as to whether Honda's
- 8 mark is functional?
- 9 A. Yes, I did.
- 10 Q. What is that opinion?
- 11 A. That it's not functional.
- 12 Q. Turning back to Applicant's Exhibit 6,
- specifically the line drawing on the last page of
- 14 that application, looking at Applicant's
- 15 Exhibit 6, could you identify which component is
- 16 the fuel tank?
- 17 A. Yes. The fuel tank is in the upper,
- 18 right-hand portion of the engine.
- 19 Q. In forming your opinions in this case,
- 20 did you consider the appearance of the fuel tank
- 21 shown in Honda's application?
- 22 A. Yes, I did.
- Q. What is the role of the fuel tank?
- 24 A. The fuel tank holds fuel.
- Q. Could you describe the appearance of

[Page 20]

- the fuel tank on the GX engine shown in Honda's
- 2 application?
- A. Yes. The appearance of this fuel tank is somewhat rectangular looking straight on, the
- 4 is somewhat looking straight on, vertical, the
- 5 top and bottom are horizontal lines. The sides
- 6 of the tank are angular, sloping upward or
- 7 sloping downward.
- 8 The tank has a horizontal seam approximately
- 9 in the middle of the fuel tank. The top edges
- 10 are beveled softly to provide a look to it, and
- 11 there's a fuel cap located on top.
- 12 Q. In your opinion, is the appearance of
- 13 the fuel tank on the GX engine in Honda's
- 14 application functional?
- 15 A. No. The appearance is not functional.
- 16 Q. What, if any, impact does the
- 17 appearance of the fuel tank on the GX engine have
- 18 on the performance of that engine?
- 19 A. It has no effect on performance.
- Q. What, if any, impact of the
- 21 appearance -- does the appearance of the fuel
- 22 tank shown in Honda's application have on the
- 23 quality of the GX engine?
- A. The appearance of the fuel tank has no
- 25 effect on the quality.

[Page 21]

- Q. What, if any, impact does the
- 2 appearance of the fuel tank in Honda's
- 3 application have on the cost to manufacture the
- 4 GX engine?
- 5 A. The appearance has no effect on the
- 6 cost.
- 7 Q. What, if any, impact does the
- 8 appearance of the fuel tank in Honda's
- 9 application have on the competitiveness of the GX
- 10 engine?
- 11 A. The appearance has no effect on
- 12 competitiveness either.
- 13 Q. Are there any limitations on where the
- 14 fuel tank can be located on the GX engine?
- 15 A. The GX engine uses a gravity flow
- system. So the fuel tank outlet has to be above
- 17 the carburetor inlet.
- 18 Q. Does the fuel tank need to be located
- on the right side of the engine to be above the
- 20 carburetor inlet?
- 21 A. No. The fuel tank can be located in
- various positions and still perform adequately.
- Q. Have you reviewed Professor Reisel's
- 24 testimony in this case?
- 25 A. Yes, I have.

[Page 22]

- Q. Are you aware that Professor Reisel's
- opinion is that the fuel tank needs to be located
- 3 on the right side of the engine for safety
- 4 reasons?
- 5 A. Yes, I've read that.
- 6 Q. Do you agree with that opinion?
- 7 A. No. The fuel tank can be located, as I
- 8 mention, in many locations. It can be extended
- 9 further to the right. You could extend it
- 10 further to the left.
- 11 Professor Reisel talks about the head gasket
- 12 leakage possibilities. I've seen and I've
- 13 designed fuel tanks that have been over the head
- 14 gasket. Some of the competition that I've seen
- on this series of engines has fuel tanks mounted
- over the head gasket area and perform equally as
- 17 well.
- 18 Q. Are you aware that it's Professor
- 19 Reisel's opinion that the fuel tank location is
- 20 dictated by the fact that the muffler and air
- 21 cleaner need to be located where they are on the
- 22 GX engine?
- 23 A. Yes. I understand he says that.
- Q. Do you agree with that opinion?
- 25 A. No, I don't.

[Page 23]

- 1 Q. Why not?
- A. It depends on what comes first in the
- 3 design. Fuel tanks, as I mentioned, can be
- 4 mounted to the left. It could be mounted further
- 5 to the right. Fuel tanks can be mounted back
- 6 away from the fan housing, towards the back side
- 7 of the engine.
- As long as they're above the carburetor
- 9 inlet, even to the left side of the engine,
- 10 there's various locations that can be used for
- 11 the fuel tank. And then the other components can
- 12 be mounted in accordance to that.
- Q. Does the shape of the fuel tank shown
- in Honda's application provide any benefits, in
- 15 terms of fuel capacity?
- 16 A. No. Actually, the shape that Honda has
- 17 chosen -- I think some of their original designs
- 18 had more capacity. For instance, on the lower,
- 19 right side, I think the fuel tank angle down
- 20 toward the blower housing and then took a
- 21 little -- there's a little triangle added to it,
- 22 if you want to call it.
- 23 Also on the lower left side, you can see a
- 24 step that was introduced later on. So now you
- 25 have a horizontal, flat surface, which was done

[Page 24]

- 1 for styling. And I think also the left-hand side
- 2 clearance was also done for styling. So you
- 3 actually lost some capacity.
- Q. Does the shape --
- 5 MR. NOWAKOWSKI: I'm going to object on
- 6 foundational grounds to his answer with regard to
- 7 whether something was done for styling or not by
- 8 Honda.
- 9 Q. Mr. Mieritz, did you review the
- 10 testimony of Honda's employee, Mr. Fujita, in
- 11 preparing your opinions in this case?
- 12 A. Yes, I did.
- Q. Do you recall that Mr. Fujita testified
- 14 regarding Honda's styling choices on the GX
- 15 engine?
- 16 A. Yes, I did.
- 17 Q. Does the shape of the fuel tank in
- 18 Honda's application provide any benefits in terms
- of compactness?
- 20 A. The shape is designed in a way to
- 21 appear compact within the engine. Yes.
- Q. You mentioned a seam across the
- approximate middle of the GX engine fuel tank.
- 24 Do you have an opinion as to whether that seam is
- 25 functional?

[Page 25]

- 1 A. Yes, I do.
- Q. What is that opinion?
- 3 A. It's nonfunctional.
- Q. Does the placement of that seam impact
- 5 the performance of the engine?
- A. No. The placement has no effect on
- 7 performance.
- Q. Does the placement of that seam impact
- 9 the cost to manufacture the engine?
- 10 A. No. The placement of the seam does not
- 11 affect the overall cost.
- 12 Q. You also mentioned beveling on the top
- 13 edge of the fuel tank.
- 14 A. Yes, I did.
- 15 Q. In your opinion, is the beveling on the
- 16 top edge of the fuel tank functional?
- 17 A. It's nonfunctional.
- 18 Q. Does the beveling on the top edge of
- 19 the fuel tank in Honda's application have any
- impact on the cost or ease to manufacture the
- 21 fuel tank?
- 22 A. No, it doesn't. On stampings of this
- 23 nature which are deep drawn, you have to have
- some type of draft in order to pull the part off
- 25 the tool, and then you cannot have sharp corners

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- on the bottom edges of the parts, so you either
- 2 have a radius or a corner break or a chamfer or a
- 3 bevel.
- 4 Q. Are you aware of any alternatives to
- 5 the design of the fuel tank of the GX engine
- 6 shown in Applicant's Exhibit 6?
- 7 A. Yes, I am.
- 8 MS. FRAZIER: Can we mark this one,
- 9 please.
- 10 (Photograph marked Applicant's
- 11 Exhibit 43.)
- 12 BY MS. FRAZIER:
- 13 Q. Mr. Mieritz, I'm handing you what have
- 14 been marked as Applicant's Exhibits 17, 21, 24
- and 43. Mr. Mieritz, could you identify
- 16 Applicant's Exhibit 17, please.
- 17 A. Applicant's 17 is a picture of a Kohler
- 18 Command Pro 7, horizontal shaft, single-cylinder
- 19 overhead valve engine.
- 20 Q. Could you identify Exhibit --
- 21 Applicant's Exhibit 21, please.
- 22 A. Exhibit 21 is a Briggs & Stratton
- 9-horsepower Intek engine, horizontal shaft,
- overhead valve slanted cylinder.
- Q. Could you identify Applicant's

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- 1 Exhibit 24, please?
- 2 A. No. 24 is a Briggs & Stratton Vanguard
- 3 9-horsepower horizontal shaft overhead valve
- 4 slant cylinder engine.
- Q. Are you familiar with the actual
- 6 engines shown in these photographs?
- 7 A. Yes, I am.
- Q. Have you seen the actual engines in
- 9 these photographs in person?
- 10 A. Yes, I have.
- 11 Q. Based on your familiarity with the
 - 24
- 12 actual engines, are Exhibits 17, 21, 23, and 43
- 13 true and accurate photographs of the engines you
- 14 just identified?
- 15 A. Yes, they are.
- 16 Q. In your opinion, which, if any, of
- 17 these engines, have fuel tanks with different
- 18 designs than the fuel tank in Honda's
- 19 application?
- MR. NOWAKOWSKI: Objection. Go ahead.
- 21 A. Can I answer?
- MS. FRAZIER: Yes.
- A. In my opinion, all four are different
- 24 in appearance than the Honda engine.
- Q. Beginning with the Applicant's

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- 1 Exhibit 17, how does the appearance of the fuel
- 2 tank on the Kohler Command Pro in Applicant's
- 3 Exhibit 17 compare with the appearance of the
- 4 fuel tank shown in Honda's application?
- 5 A. Looking straight on in Exhibit 17, the
- 6 fuel tank has somewhat of a square overall
- 7 appearance. The immediate effect that you see is
- 8 the diagonal seam that runs sloping from left to
- 9 right, downward. The left and right edges of the
- 10 tank have heavy angled surfaces to them. There
- seems to be large radii on the four corners,
- 12 softening the overall look of the tank. The top
- is horizontal. And it's -- it has a bevel that's
- 14 a very steep angled bevel.
- On top of the tank is a fuel tank cap.
- 16 Compared to the Honda, the Honda has more of a
- 17 rectangular look, horizontal lines on the top, on
- 18 the bottom, horizontal seam. The top edge
- 19 beveling is softer. The angles on the left- and
- 20 right-hand side of the tank are not as steep as
- 21 what I see as on the Kohler engine.
- Q. Looking at Applicant's Exhibit 21, how
- 23 does the appearance of the fuel tank in
- 24 Applicant's Exhibit 21 compare with the
- appearance of the fuel tank shown in Honda's

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- 1 application?
- 2 A. On Exhibit 21, on the Briggs & Stratton
- 3 Intek engine, the appearance of the fuel tank has
- 4 more of a -- again, a tall, square appearance.
- 5 This tank is also plastic, whereas the Honda tank
- 6 is metal. This tank has a horizontal theme --
- 7 seam that is thicker than the seam that's on the
- 8 Honda metal tank. The edges of the fuel tank are
- 9 more straight on this tank. The top portion is
- 10 horizontal. The edges and top are connected by
- 11 seams like a radius. And also the four corners
- 12 are radiused.
- In the front of the tank is a large overflow
- 14 area where the fuel tank cap is attached to, and
- 15 there seems to be some ribs on top of the tank
- 16 that channel off the fuel overflow.
- 17 Compared to the Honda engine, again, the
- 18 Honda engine is rectangular, horizontal lines,
- 19 bevels on the top, horizontal seam. There's no
- 20 overflow that you can see from this view. Fuel
- 21 tanks -- fuel caps are on the top.
- 22 Q. Looking at Applicant's Exhibit 24, how
- 23 does the appearance of the fuel tank in
- 24 Applicant's Exhibit 24 compare with the
- 25 appearance of the fuel tank shown in Honda's

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- 1 application?
- A. On this Vanguard 9-horsepower engine,
- 3 the fuel tank sits behind what you see as the
- 4 Vanguard 9-horsepower decal. That's actually the
- 5 air cleaner cover. Behind that is the element.
- 6 Behind that is the fuel tank. The fuel tank on
- 7 this particular engine is plastic. It has a seam
- 8 running -- horizontal seam running circumference,
- 9 between the two halves.
- 10 The fuel tank is large. It extends from the
- 11 right-hand side flush with the blower housing,
- 12 over to the left-hand side, and it actually goes
- over the cylinder head. It's rectangular in
- 14 shape. And it has large chamfered edges,
- 15 compared to the Honda engine, again, which is
- 16 rectangular. It has horizontal lines, it has a
- 17 horizontal seam, horizontal top. The beveling is
- softer on the Honda engine versus the Vanguard.
- 19 And it's different in size and location.
- Q. If the Vanguard engine in Applicant's
- 21 Exhibit 24 is viewed from the same front
- 22 perspective as shown in Honda's trademark
- 23 application, is the fuel tank visible?
- A. No, it isn't. You would actually see
- 25 the Vanguard decal, which is, like I said, the

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- 1 air cleaner cover. To the left of that is a
- 2 plastic component that attaches the clean intake
- 3 air to the carburetor. And the fuel tank is
- 4 located behind these parts.
- 5 Q. Turning to Applicant's Exhibit 43, how
- does the appearance of the fuel tank on the
- 7 engine in Applicant's Exhibit 43 compare with the
- 8 appearance of the fuel tank shown in Honda's
- 9 trademark application?
- 10 A. The appearance of this tank is a
- 11 rectangular-shaped, low-profile, long-looking
- 12 tank, compared to Honda, which is more
- 13 rectangular, not as long. This tank is also
- 14 metal on the Kawasaki. The seam you can see is
- 15 actually -- right above the control panel, you
- 16 can see a couple of nuts attached to the seam.
- 17 So the seam is two-thirds of the way down the top
- portion of the tank. The seam is a horizontal
- 19 seam, similar to the Honda, which is a horizontal
- seam; but, again, the location is much lower than
- on the Honda tank.
- The overall appearance from the front of the
- 23 Kawasaki tank has vertical lines on the right and
- 24 left, intersecting a horizontal top plane, which
- 25 is then broken by a chamfered top. The fuel tank

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- 1 cap is located on top. The fuel tank extends
- 2 from the right side of the engine to the left
- 3 side of the engine, over the cylinder head.
- 4 Q. How do the fuel tanks in Applicant's
- 5 Exhibits 17, 21, 24 and 43 compare to the fuel
- tank on the GX engine, in terms of performance?
- 7 MR. HERRING: Objection. Lacks
- 8 foundation.
- 9 Q. Mr. Mieritz, have you had actual
- experience with the engines shown in Exhibits 17,
- 11 21, 24, and 43?
- 12 A. Yes, I have.
- 13 Q. And based on your experience, how do
- 14 the fuel tanks in those exhibits compare to the
- 15 fuel tank on the GX engine, in terms of
- 16 performance?
- 17 MR. HERRING: Same objection.
- 18 Foundation.
- 19 A. They all perform equally with respect
- 20 to the fuel tank.
- Q. And how do the fuel tanks in
- 22 Applicant's Exhibits 17, 21, 24 and 43 compare to
- 23 the fuel tank on the GX engine in terms of
- 24 quality?
- MR. HERRING: Same objection. Also

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- 1 vague.
- A. In terms of quality, I assume they all
- 3 perform the same as the Honda.
- Q. And what does "quality" mean to you?
- 5 A. "Quality" means, to me, whether the
- 6 parts can withstand the life of the engine,
- 7 whether they crack, whether they fail before any
- 8 of the other engine components break.
- 9 Q. Mr. Mieritz, turning back to
- 10 Applicant's Exhibit 6 --
- 11 A. Yes.
- 12 Q. -- could you identify which component
- is the fan cover?
- 14 A. Yes, I can.
- 15 Q. Could you describe that for us, please.
- 16 A. The fan cover is located on the front
- 17 of the engine. It's located beneath the fuel
- 18 tank, per se. The Honda fan cover -- let's start
- 19 at the 12:00 position -- has a radius running
- from 12:00 to approximately 5 o'clock. At
- 21 5 o'clock, it intersects a horizontal plane, and
- then approximately at 7 o'clock, it's slanted
- 23 upward towards the carburetor. It intersects a
- 24 vertical line, and that vertical line runs upward
- to the top of the fan housing, which

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- intersects -- which is intersected by a
- 2 horizontal line. At that intersection, there's a
- 3 large radius.
- Q. In forming your opinions in this case,
- 5 did you consider the appearance you just
- 6 described of the fan cover?
- 7 A. Yes, I did.
- Q. What is the purpose of the fan cover?
- 9 A. The fan cover has three purposes.
- 10 First, the rewind starter is attached to the fan
- 11 housing. Second purpose serves as a cover -- a
- safety cover for the fan and rotating screen.
- 13 And the third purpose is to direct cooling air to
- 14 the engine.
- 15 Q. In your opinion, is the appearance of
- 16 the GX engine fan cover shown in Honda's
- 17 application functional?
- A. No, it isn't.
- 19 Q. Does the shape of the fan cover that
- you described have any effect on the performance
- of the engine?
- 22 A. Actually, the shape in Honda's fan
- 23 cover -- and this is from what I read in
- 24 Mr. Fujita's deposition -- is actually
- detrimental to the airflow. The right-hand upper

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- 1 corner, according to Mr. Fujita, was designed
- with styling, stylists, to have that look, that
- 3 particular corner reduce the airflow, so Honda
- 4 had to go to a larger fan to compensate for that
- 5 loss.
- 6 Q. In your experience, would a corner like
- 7 the one you described on the Honda GX engine
- 8 typically cause interference like you just
- 9 described?
- 10 A. Interference isn't the right -- it
- 11 causes turbulence within the blower housing,
- which can affect the air cooling.
- 13 Q. What, if any, impact does the
- 14 appearance of the GX engine fan cover have on the
- 15 quality of that engine?
- 16 A. The appearance of the fan cover has no
- 17 effect on quality.
- Q. What, if any, impact does the
- 19 appearance of the GX engine fan cover have on the
- 20 cost to manufacture the engine?
- 21 A. The appearance has no effect on the
- 22 manufacturing cost.
- Q. What, if any, impact does the
- 24 appearance of the fan cover on the GX engine have
- on the competitiveness of the engine?

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- 1 A. The appearance of the fan cover has no
- 2 effect on the competitiveness.
- Q. Does the angle on the lower left side
- 4 of the fan cover that you described help to
- 5 direct cool air to the cylinder head on the
- 6 engine?
- 7 A. Yes, it does.
- Q. Does the slant need to be the angle it
- 9 is on the GX engine in order to achieve that
- 10 purpose?
- 11 A. No. The slant can be less, can be
- 12 more. It can take on different shapes and still
- 13 provide cooling.
- 14 Q. Are you aware of any alternatives to
- 15 the design of the fan cover shown in Applicant's
- 16 Exhibit 6?
- 17 A. Yes, I am.
- 18 Q. Mr. Mieritz, I'm handing you what's
- 19 been previously marked as Applicant's Exhibit 23.
- 20 Do you recognize Applicant's Exhibit 23?
- 21 A. Yes. This is a Subaru engine.
- Q. Are you familiar with the Subaru engine
- 23 shown in Applicant's Exhibit 23?
- 24 A. Yes. I've seen it before.
- Q. Based on your familiarity with it, is

[Page 37] 1 Applicant's Exhibit 23 a true and accurate 2 depiction of the Subaru engine it shows? 3 Α. Yes, it is. (Photograph Bates-stamped AHGX0101287 marked Applicant's Exhibit 44.) 5 BY MS. FRAZIER: 6 7 And the court reporter has just handed 8 you Applicant's Exhibit 44. Do you recognize that exhibit? 10 Α. Yes, I do. 11 Tell us what it is, please. Q. That's a Kohler Command Pro 6 12 horizontal shaft, single cylinder, overhead valve 13 14 engine. 15 Are you familiar with the Kohler Q. Command Pro 6 shown in Applicant's 44? 16 17 Yes, I am. Α. 18 Have you seen that engine? Q. 19 Α. Yes, I have. 20 And based on your familiarity with that Q. 21 engine, is this photograph a true and accurate 22 depiction of that engine? 23 Α. Yes, it is. 24 Q. Now, if you could look, please, at

25

Applicant's Exhibits 21, 23, 43, and 44.

[Page 38] 1 (Witness complies.) 2 Α. Okay. 3 Which, if any, of the engines in these Q. exhibits have a fan cover with a different 4 appearance than the fan cover on the GX engine in 5 6 Honda's application? 7 MR. HERRING: Objection. 8 Α. Answer? 9 MS. FRAZIER: Yes. 10 They all have a different appearance Α. 11 than the Honda GX engine. Beginning with Applicant's Exhibit 21, 12 13 how does the appearance of the fan cover on the 14 engine in Applicant's Exhibit 21 compare to the 15 appearance of the fan cover in Honda's 16 application? 17 Again, I'll start at the 12 o'clock Α. 18 position, but actually back up towards the 11:00 19 position. That's where the radius starts, runs 20 clockwise, towards 5 o'clock, where that radius 21 intersects a horizontal plane, running until 22 about 7 o'clock. Then it tapers upwards, and on 23 this picture, it's behind the air cleaner, which

24

25

you can't see.

that runs upwards. And then you can see

There must be a vertical line

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- 1 approximately beneath the red knob, there's a
- 2 sloped, angular surface of the housing that
- 3 slopes downward to meet the 11:00 radius with an
- 4 intersection at that point. And in my mind, this
- 5 is a -- what I call a lazy 6. So it's a numeral
- 6 6, laying on its left side.
- 7 Q. How does the appearance of the fan
- 8 cover in Applicant's Exhibit 23 compare to the
- 9 appearance of the fan cover in Honda's
- 10 application?
- 11 A. Again, starting at the 12:00, backing
- up to the 11:00, that's where the radius on this
- 13 particular fan starts. It's a true radius,
- running until about the 5:00, 5:30 position,
- where it meets a horizontal -- looks like a
- 16 horizontal plane. Then it seems to be another
- 17 radius running from about 7 o'clock to 8 o'clock
- 18 that intersects a tapered surface on the lower
- 19 left side.
- 20 Again, I can't see behind the air cleaner
- 21 cover. It must be a horizontal plane that runs
- 22 upward. And you can see also coming downward,
- 23 behind the controls is the housing that
- 24 intersects the circular portion at 11:00. And,
- again, the edges on this have beveling, compared

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- to the Honda engine, which has rounded edges.
- 2 The Honda engine has horizontal lines, top and
- 3 bottom. Again, this Subaru is what I call a
- 4 lazy 6.
- 5 Q. Moving on to Applicant's Exhibit 43,
- 6 how does the appearance of the fan cover on the
- 7 Kawasaki engine in that exhibit compare to the
- 8 appearance of the fan cover in Honda's
- 9 application?
- 10 A. Again, we'll start at the 12:00
- position. There, you can see from 12:00 to 3:00,
- 12 it's a horizontal plane intersecting a vertical
- 13 plane. In fact, the horizontal plane runs along
- 14 the entire top portion of the fan housing. So 12
- to 3:00 is a horizontal plane intersecting a
- 16 vertical plane that forms somewhat of a soft
- 17 right, right angle.
- 18 Then you have a true radius, running from
- 19 3:00 to 6:00 to 9:00 that actually looks like
- it's a spiral shape to it. And then at 9:00,
- 21 upward, is a vertical line intersecting the
- 22 horizontal top line. The edges are somewhat
- 23 radiused to give it a softened look. I call this
- 24 a D, D-shaped blower housing, fan housing. But
- 25 the D is rotated 90 degrees clockwise.

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- 1 Q. Turning, then, to Applicant's
- 2 Exhibit 44 --
- 3 A. Okay.
- Q. -- how does the appearance of the fan
- 5 cover on the Kohler Command Pro 6 in that exhibit
- 6 compare to the appearance of the fan cover on the
- 7 GX engine?
- 8 A. Again, starting at the 12:00 position,
- 9 going back to the 11, the true radius starts at
- 10 that the position, runs around until
- approximately 5:00, where it matches a horizontal
- 12 line, intersects a horizontal line. That
- 13 horizontal line continues until about 7 o'clock,
- where it intersects a slope -- low sloping,
- 15 slanted appearance that goes upward, intersects
- with a vertical line that is actually behind the
- 17 cover that you can't see. And then down behind
- 18 the fuel shutoff valve on this engine, you can
- 19 see the housing coming downward, intersecting at
- the 11:00 position.
- So, again, this is what I call a lazy 6.
- The edges on this housing are radiused. It has
- 23 more of a sharper-looking surface than the Honda,
- 24 which has more of a softer look to it. The Honda
- 25 has more horizontal lines to it.

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- 1 Q. Mr. Mieritz, did you prepare a
- 2 demonstrative showing the differences between the
- 3 appearances of the fan covers on the engines in
- 4 Applicant's Exhibit 21, 23, 43 and 44 that you
- 5 just discussed?
- 6 A. Yes, I have.
- 7 (Demonstrative of Honda GX and
- 8 Alternative Fan Cover Designs marked
- 9 Exhibit 45.)
- 10 BY MS. FRAZIER:
- 11 Q. You've just been handed what's been
- 12 marked as Applicant's Exhibit 45. Is this the
- 13 demonstrative you created?
- 14 A. Yes, it is.
- 15 Q. What does this demonstrative show?
- A. What I'm trying to show here are the
- different shapes from the Honda GX blow housing.
- 18 As you can see on the left-hand side is the Honda
- 19 GX, as I mentioned, horizontal lines, top and
- 20 bottom, and a vertical line on the left-hand
- 21 side, taper on the lower left, and radiused.
- 22 The Briggs Intek as I am depicting, as I
- 23 mentioned, has what I've called the lazy 6 look
- 24 to it. There isn't -- there's only one
- 25 horizontal -- maybe one horizontal line on the

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- 1 bottom. It seems to be a small horizontal line
- on the upper left side.
- 3 The Kawasaki, again, is the rotated D shape
- 4 that I've described. The Subaru EX, again, is
- 5 more circular and is the lazy 6, compared to the
- 6 Honda, which is not a lazy 6. Kohler Command,
- 7 again, is a lazy 6, but it seems to be resting at
- 8 a shallower angle than the Briggs or the Subaru
- 9 engine.
- MS. FRAZIER: Let's take a short break.
- 11 (A recess was taken.)
- 12 BY MS. FRAZIER:
- 13 Q. Mr. Mieritz, turning to Exhibit 21 --
- 14 A. Okay.
- 15 Q. -- based on your experience with the
- 16 Briggs Intek engine, how does the fan cover on
- 17 that engine shown in Exhibit 21 compare to the
- 18 fan cover on the GX engine in terms of
- 19 performance?
- 20 A. My experience with Intek engines,
- 21 again, I was in the Vanguard line, but the
- 22 engineering departments run the same tests, run
- 23 the same comparative tests.
- 24 I would expect this shape to provide
- 25 adequate cooling for the performance of the

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- 1 engine in all different circumstances, which
- would be equivalent to what Honda has.
- MR. NOWAKOWSKI: Before we go further,
- 4 I'm going to object -- register a late objection
- 5 to that question on foundation grounds,
- 6 speculation, and also beyond the scope of the
- 7 opinions that he's rendered in this case in his
- 8 multiple reports.
- 9 Q. Mr. Mieritz, did you submit reports in
- 10 this case?
- 11 A. Yes, I did.
- 12 Q. And in those reports, did you discuss
- 13 alternative fan cover designs?
- 14 A. Yes, I did.
- 15 Q. Was one of the alternative designs you
- 16 discussed the Briggs Intek engine shown in
- 17 Applicant's Exhibit 21?
- 18 A. Yes, it was.
- 19 Q. And did you offer an opinion in that
- 20 report as to whether or not the design of that
- 21 fan cover impacts performance?
- 22 A. Yes, I did.
- Q. Now, based on your experience with the
- 24 engine in Exhibit 21, how does the fan cover on
- 25 that engine compare to the fan cover on the GX

[Page 45] 1 engine, in terms of cost to manufacture? 2 MR. HERRING: Same objections. 3 MS. FRAZIER: You can answer. 4 Α. Based on my experience, the manufacturing costs would be similar. 5 6 0. Turning to Applicant's Exhibits 17, 43, 7 and 44 --8 Α. Okay. 9 (Witness complies.) 10 -- have you seen any data indicating Q. 11 that there's a difference in the performance between the fan covers shown on Applicant's 12 Exhibit 17, 43, and 44 and the fan cover on the 13 14 GX engine? 15 MR. NOWAKOWSKI: Objection. 16 Foundation. 17 No, I haven't. Α. 18 Have you seen any data indicating there Q. 19 is a difference in terms of cost to manufacture 20 the fan covers shown in Applicant's Exhibits 17, 21 43, and 44 as compared to the fan cover on the GX 22 engine? 23 MR. NOWAKOWSKI: Objection. 24 Foundation. 25 Α. No, I haven't.

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- Q. Mr. Mieritz, returning to Applicant's
- 2 Exhibit 6, could you identify which component is
- 3 the air cleaner cover?
- 4 A. Yes. The air cleaner cover on this
- 5 exhibit is located on the upper, left-hand corner
- 6 of the engine.
- 7 Q. In forming your opinion in this case,
- 8 did you consider the appearance of the air
- 9 cleaner cover shown in Honda's application?
- 10 A. Yes, I did.
- 11 Q. What is the role of the air cleaner
- 12 cover?
- 13 A. Air cleaner cover will cover the air
- 14 filter element, protect it.
- 15 Q. Could you please describe the
- 16 appearance of the air cleaner cover on the GX
- 17 engine in Honda's application?
- 18 A. The appearance of the cover on this
- 19 application, looking front on, appears to be
- square shaped, horizontal lines, top, bottom, and
- about a third of the way up from the bottom
- there's a horizontal belt-like line that actually
- 23 is in line with the fuel tank seam.
- 24 The edges have slight draft or angled
- 25 surfaces to them. The top portion has a

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- beveled -- softened beveled appearance to match
- 2 the beveled appearance running across the top of
- 3 the fuel tank. There's a wingnut located on top
- 4 of the air cleaner cover.
- 5 Q. In your opinion, is the appearance of
- 6 the GX engine's air cleaner cover in Honda's
- 7 application functional?
- 8 A. In my opinion, it is nonfunctional.
- 9 Q. What, if any, impact does the
- 10 appearance of the air cleaner cover shown in
- 11 Honda's application have on the performance of
- 12 the engine?
- 13 A. The appearance of the cover has no
- 14 effect on performance.
- Q. What, if any, impact does the
- 16 appearance of the GX engine air cleaner cover
- 17 shown in the application have on the quality of
- 18 the engine?
- 19 A. The appearance of the air cleaner cover
- 20 has no effect on the quality of the engine.
- Q. And what, if any, impact does the
- 22 appearance of the air cleaner cover in Honda's
- 23 application have on the cost to manufacture the
- 24 engine?
- 25 A. The appearance of the cover has no

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- 1 effect on the cost to manufacture.
- Q. What, if any, impact does the
- 3 appearance of the GX engine air cleaner cover
- 4 shown in Honda's application have on the
- 5 competitiveness of the engine?
- A. Air cleaner cover has no effect -- air
- 7 cleaner cover appearance has no effect on the
- 8 competitiveness of the engine.
- 9 Q. Are you aware that it's Professor
- 10 Reisel's opinion that the air cleaner cover needs
- 11 to be located to the left side of the engine in
- 12 order to improve volumetric efficiency?
- 13 A. Yes. I've read that in his report.
- 14 Q. Do you agree with that opinion?
- 15 A. No. I do not.
- Q. Why not?
- 17 A. These small-engine engines are very low
- 18 efficient. High-efficient engines, such as race
- 19 engines, automotive engines, there, that holds
- 20 true. But on small engines where your horsepower
- 21 per cubic inch is very low, your efficiency is
- 22 not affected by the location of the air cleaner
- 23 element. If the air cleaner element is moved to
- 24 various positions, the carburetor is calibrated
- 25 for that change.

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- 1 Q. Are you aware that it is Professor
- 2 Reisel's opinion that the air cleaner cover will
- 3 clog more easily if it is top mounted, as it is
- 4 in the application, versus front mounted?
- 5 A. Yes. I read that in his report.
- 6 Q. Do you agree with that opinion?
- 7 A. I disagree with that opinion.
- Q. Why do you disagree with that opinion?
- 9 A. Again, these engines, their
- 10 applications which are generators, compressors,
- 11 power washers, are very clean environments.
- 12 There's not a lot of dust, debris. There's no
- 13 grass clippings. The position of a panel mount
- 14 air cleaner or a front-mount air cleaner in
- 15 relation to a top-mount air cleaner, where the
- 16 clean air, where the air is taken in is -- the
- 17 difference is only maybe an inch, there is not
- 18 that much change in the -- in the air and debris
- in the air within that 1-inch increment.
- Q. Are you aware that it's Professor
- 21 Reisel's opinion that locating the air cleaner on
- 22 the left side of the engine reduces manufacturing
- 23 costs?
- 24 A. Yes. I've read that in his report
- 25 also.

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- 1 Q. Do you agree with that opinion?
- 2 A. No, I do not.
- 3 Q. Why not?
- A. Actually, if you were to mount the air
- 5 cleaner front mounted, which we call panel mount,
- 6 it would be a lower cost. You would eliminate
- 7 some parts. This particular design that Honda
- 8 has, which is a top mount, there's most likely
- 9 additional components that you cannot see that
- secure the air cleaner element in place.
- 11 Q. Is it necessary for an engine to have a
- 12 rectangular air cleaner cover in order to compete
- 13 effectively?
- 14 A. No, it isn't.
- 15 Q. What other shapes could the air cleaner
- 16 cover take?
- 17 A. The air cleaner cover, as we talked
- 18 about, needs to cover the element. The air
- 19 cleaner cover on the particular Honda engine that
- we're talking about, which is square, could take
- on a trapezoid shape, the edges could be angled.
- The top could be stepped. The top could be
- 23 domed. It could be a cylindrical design.
- There's many different shapes that you can take
- on. You just need to maintain your clearance

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- between the cover and the element so there's no
- 2 air restriction.
- 3 O. You mentioned a line about -- I believe
- 4 you said about a third of the way up on the air
- 5 cleaner cover.
- A. Yes.
- 7 Q. Is that line, in your opinion,
- 8 functional?
- 9 A. In my opinion, that is not functional.
- 10 Q. Is the beveling on the top edge of the
- 11 air cleaner cover that you described functional?
- 12 A. In my opinion, the beveling is
- 13 nonfunctional.
- 14 Q. Do any of the elements just discussed,
- the shape, beveling, or line across the air
- 16 cleaner cover, have any impact on the performance
- of the engine?
- 18 A. No. None of the shapes that we
- 19 discussed has any effect on engine performance.
- Q. Do any of those shapes have an impact
- on the cost to manufacture the air cleaner cover?
- 22 A. No. The shapes do not affect the cost.
- Q. Are you aware of any alternatives to
- 24 the design of the air cleaner cover shown in
- 25 Applicant's Exhibit 6?

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- 1 A. Yes. I'm aware of quite a few.
- Q. Turning again to Applicant's
- 3 Exhibits 17, 21, 23, and 24 --
- 4 A. Okay.
- 5 Q. -- which, if any, of the engines in
- 6 those exhibits have an air cleaner cover with a
- 7 different appearance than the air cleaner cover
- 8 on the GX engine shown in Honda's application?
- 9 A. In my opinion, all four of these
- 10 exhibits have different air cleaner covers versus
- 11 the Honda GX engine.
- 12 Q. Beginning with Applicant's Exhibit 17,
- 13 how does the appearance of the air cleaner cover
- on the Kohler Command 7 in that exhibit compare
- to the appearance of the fan cover on the GX
- 16 engine in Honda's application -- excuse me, the
- 17 air cleaner cover in Honda's application?
- 18 A. The Kohler Command Pro 7 air cleaner
- 19 cover appears to be a tall, rectangular shaped.
- 20 The top portion actually seems to have a
- 21 spherical shape to it, dome shape. This
- 22 particular air cleaner has over the center
- 23 clamps. You can see the wire form on the right
- 24 side. The intake air is taken in by a snout that
- you see at about the upper left-hand side.

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- 1 And compared with the Honda engine, the
- 2 Honda engine again is more squarish, has
- 3 horizontal lines. There's a wingnut on top. So
- 4 there's -- that's the differences I see between
- 5 the Kohler and the Honda engine.
- Q. Turning to Applicant's Exhibit 21, how
- 7 does the appearance of the air cleaner cover on
- 8 the Briggs Intek engine shown in that exhibit
- 9 compare to the appearance of the air cleaner
- 10 cover in Honda's application?
- 11 A. The appearance on the Honda -- excuse
- 12 me. The appearance on the Briggs & Stratton
- 13 Intek 9 horsepower is a front-mount panel air
- 14 cleaner. This front-mount panel air cleaner is
- 15 taking on a square appearance. At the lower
- 16 portion of the air cleaner, you can see three
- 17 little projections which are basically hinges.
- 18 The perimeter of the air cleaner cover has a
- 19 large chamfered look to it. It is mounted flush,
- outward with the rewind, compared to the Honda
- 21 engine, which is mounted on top of the engine.
- 22 It's mounted back from the rewind. The Honda
- 23 appearance, again, is squarish, with beveled
- 24 edges, soft beveled edges and horizontal lines.
- Q. Moving on to Applicant's Exhibit 23,

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- 1 how does the appearance of the air cleaner cover
- 2 in the Subaru engine in Applicant's Exhibit 23
- 3 compare to the appearance of the air cleaner
- 4 cover on the Honda GX engine in Honda's
- 5 application?
- 6 A. The appearance of the Subaru air
- 7 cleaner cover is, looking from the 2D
- perspective, actually a trapezoid, horizontal
- 9 portions on the bottom, vertical lines left and
- 10 right that intersect a leftward sloping shape.
- 11 So from the right side of the air cleaner cover
- 12 to the left side, it slopes downward with a large
- 13 sloping radius.
- 14 On top of the cover are very large beveled
- 15 surfaces that mate on the four corners with large
- 16 radii. There is a horizontal belt-like
- appearance on this cover that runs along the
- front side of the cover, but it does not match
- 19 the fuel tank seam, as on the Honda engine, the
- 20 belt-like appearance matches the fuel tank seam
- 21 to provide continuity.
- 22 And, again, the air cleaner on the Honda is
- 23 squarish in shape with beveling on top. The
- 24 Honda has a wingnut. I don't know what type of
- 25 attachment they use on the Subaru. I can't see

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- 1 anything.
- Q. How does the appearance of the air
- 3 cleaner cover on the Vanguard 9-horsepower engine
- 4 in Applicant's Exhibit 24 compare to the
- 5 appearance of the air cleaner cover on the Honda
- 6 GX engine in Honda's application?
- 7 A. The appearance of the Vanguard
- 9-horsepower air cleaner cover is located above
- 9 the rewind on the front of the engine, runs
- 10 length-wise from right to left, across the entire
- 11 fan housing, we'd call it. The cover is a
- 12 rectangular, thin shape, low profile, has large
- 13 beveling on the top and radiuses on the corner.
- 14 Compared to the Honda, Honda, again, has a
- 15 squarish look with soft beveling on top, and a
- 16 horizontal line matching the fuel tank seam.
- 17 There's actually two knobs on here that hold the
- Vanguard air cleaner in place. They're hard to
- see, but I know they're there.
- O. How does the air cleaner cover in
- 21 Applicant's Exhibit 24 compare to the air cleaner
- cover on the GX engine, in terms of performance?
- 23 A. It performs just as well as the Honda
- 24 engine.
- Q. How does it perform in terms of cost to

[Page 56] 1 manufacture? 2 MR. HERRING: Object to --3 MR. NOWAKOWSKI: Objection to foundation. 5 MR. HERRING: And the last question, as 6 well. Same objection. Mr. Mieritz, what engine is in 7 8 Applicant's Exhibit 24? Α. The Vanguard 9-horsepower. 10 Do you have personal experience testing Q. 11 the air cleaner cover on the Vanguard 9-horsepower engine? 12 13 Α. Yes, I do. 14 And based on that experience, how does 15 the air cleaner cover in the exhibit, Applicant's 16 Exhibit 24 compare with the Honda GX air cleaner 17 cover? 18 MR. HERRING: Same objection. Lacks foundation. Also outside the scope of the 19 20 numerous expert reports. 21 MS. FRAZIER: You may answer. 22 In my experience, I would expect -- I Α. 23 feel that the air cleaner cover performs as --24 equally as well as the Honda air cleaner cover.

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25

And do you have experience with the

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- 1 cost to manufacture the air cleaner cover shown
- 2 in Applicant's Exhibit 24?
- A. Yes, I do.
- Q. And based on your experience, how does
- 5 the cost to manufacture that air cleaner cover
- 6 compare to the cost to manufacture the type of
- 7 air cleaner cover shown in Honda's application?
- 8 MR. HERRING: Same objections. Lacks
- 9 foundation. Outside the scope of the expert
- 10 reports.
- 11 A. It would be similar in cost.
- 12 Q. And, Mr. Mieritz, have you seen any
- data regarding the cost to manufacture the air
- 14 cleaner covers in Applicant's Exhibits 17 or 23?
- 15 A. Have I seen any data to manufacture the
- 16 air cleaner cost?
- 17 O. Yes.
- 18 A. No, I haven't.
- 19 Q. Turning back to Applicant's Exhibit 6,
- 20 the application --
- 21 A. Okay.
- Q. -- could you identify which component
- is the carburetor cover?
- 24 A. Yes. Carburetor cover is located
- 25 beneath the air cleaner cover, and it's attached

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- to the carburetor by two bolts. So it's located
- on the left-hand side of the engine beneath the
- 3 air cleaner cover.
- Q. In forming your opinions in this case,
- 5 did you consider the appearance of the carburetor
- 6 cover?
- 7 A. Yes, I did.
- Q. What is the purpose of the carburetor
- 9 cover?
- 10 A. This carburetor cover has approximately
- 11 three purposes, in my mind. It acts as an air
- 12 cleaner base for the air cleaner element. You
- 13 need to connect the clean air to the carburetor
- 14 through a 90-degree elbow on this design so it
- 15 has that elbow included into it. And then it
- 16 also has some cover on the right side of the
- 17 component which incorporates a choke lever and a
- 18 fuel shutoff lever.
- 19 Q. In your opinion, is the appearance of
- 20 the GX engine carburetor cover shown in
- 21 Applicant's Exhibit 6 functional?
- 22 A. In my opinion, it's not functional.
- Q. What, if any, impact does the
- 24 appearance of the carburetor cover on the GX
- engine have on the performance of the engine?

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- 1 A. The appearance of the carburetor cover
- 2 has no effect on performance.
- Q. What, if any, impact does the
- 4 appearance of the carburetor cover on the GX
- 5 engine have on the quality of the engine?
- 6 A. The appearance of the carburetor cover
- 7 has no effect on the quality.
- 8 Q. What, if any, impact does the
- 9 appearance of the carburetor cover on the GX
- 10 engine have on the cost to manufacture the
- 11 engine?
- 12 A. The appearance has no effect on the
- 13 manufacturing cost.
- Q. And what, if any, impact does the
- 15 appearance of the carburetor cover on the GX
- 16 engine have on the competitiveness of the engine?
- 17 A. The appearance of the carburetor cover
- 18 has no effect on the competitiveness of the Honda
- 19 GX engine.
- Q. Are you aware of any alternatives to
- 21 the design of the carburetor cover shown in
- 22 Honda's application?
- 23 A. Yes. I'm aware of a few. Yes.
- Q. And turning again to Applicant's
- 25 Exhibits 17, 21, 23, and 44 --

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- 1 A. Okay.
- Q. -- which, if any, of these engines in
- 3 Exhibits 17, 21, 23, and 44 have a carburetor
- 4 cover with a different appearance than the GX
- 5 engine shown in Honda's application?
- 6 A. Three of them have a carburetor cover
- 7 which is different in appearance. One of them
- 8 does not even use a carburetor cover.
- 9 Q. Which one does not use a carburetor
- 10 cover?
- 11 A. The Intek 900, which is a front
- 12 panel-mount air cleaner, does not use a
- 13 carburetor cover.
- 14 Q. And then beginning with the Kohler
- 15 Command Pro 7 in Applicant's Exhibit 17, how does
- 16 the appearance of the carburetor cover on that
- 17 engine compare to the appearance of the
- 18 carburetor cover in Honda's application?
- 19 A. The appearance of the Kohler Command
- 20 carburetor cover is plastic. It has the air
- 21 cleaner base, which holds the element. There is
- 22 a left vertical line that intersects a large,
- 23 sloped surface that actually blends in with the
- 24 fan housing. So you have a continual sloped
- 25 appearance from the left-hand side of the engine,

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- 1 running downward towards the fan housing at the
- 2 mounting legs.
- 3 Compared to the Honda, the Honda engine does
- 4 not have this sloped appearance to it. The Honda
- 5 engine has more of a -- horizontal line
- 6 components to it. The Honda engine has recessed
- 7 levers within it. It looks as though this
- 8 particular engine has a choke and also a fuel
- 9 shutoff that is also recessed within the
- 10 carburetor cover.
- 11 Q. Turning to Applicant's Exhibit 23, how
- 12 does the Subaru -- how does the appearance of the
- 13 carburetor cover on the Subaru engine in that
- 14 exhibit compare to the appearance of the
- 15 carburetor cover in Honda's application?
- 16 A. On Exhibit 23 the Subaru carburetor
- 17 cover, to me, has a tall appearance to it; tall,
- square, sharp edges. You can also see it's used
- 19 to mount the air cleaner base. The choke is
- 20 recessed underneath the -- a portion of it. And
- 21 there's also -- it looks to be a fuel shutoff
- 22 valve behind the air cleaner cover -- air
- 23 cleaner -- the carburetor cover, excuse me.
- 24 The overall appearance again, is tall and
- sharp, compared to the Honda, which is horizontal

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- 1 lines. The Honda has controls that are recessed,
- both choke and fuel included in the carburetor
- 3 cover.
- Q. And, finally, Exhibit 44, how does the
- 5 appearance of the carburetor cover on the Kohler
- 6 Command Pro 6 in Applicant's Exhibit 44 compare
- 7 to the appearance of the carburetor cover in
- 8 Honda's application?
- 9 A. On the Kohler Command Pro 6, the
- 10 carburetor cover, again, is used to support the
- 11 air cleaner element. But looking front-on at the
- 12 carb cover, there's a vertical line on the left
- side that intersects, again, a sloped portion
- 14 that blends with the slope or slant of the fan
- 15 housing. There are no controls located within
- 16 this carb cover. The fuel shutoff valve is
- 17 located outside of it. The choke control is
- 18 located behind the cover.
- 19 It has two mounting bolts located when you
- 20 look front-on. It has a bland, plain-looking
- 21 appearance to me with rounded edges, compared to
- 22 the Honda engine, which, again, is more
- 23 horizontal lines, shaped to conform with the
- 24 other horizontal lines within the engine. The
- 25 Honda has two mounting bolts for attaching it,

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- 1 and the Honda has recessed choke and fuel
- 2 shutoff.
- 3 Q. In your opinion, would any of the
- 4 differences in appearance you described between
- 5 the carburetor covers in Applicant's Exhibits 17,
- 6 21, 23, and 44 impact the performance of those
- 7 engines?
- 8 A. No, they wouldn't.
- 9 Q. And, in your opinion, would any of the
- 10 differences you described in the appearance of
- 11 the carburetor covers in those engines impact the
- 12 cost to manufacture those engines?
- A. No. The differences, in my opinion, do
- 14 not affect the manufacturing cost.
- 15 Q. Where are the controls located on the
- 16 GX engine shown in Honda's application?
- 17 A. The choke control and the fuel shutoff
- 18 control are located in the carb cover, recessed
- in the exhibit that sits right above the rewind
- 20 handle, if you want to call it. The speed
- 21 control is actually located on top of the fan
- 22 housing between the air cleaner cover and fuel
- 23 tank.
- Q. Is it necessary to locate the controls
- 25 near the carburetor?

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- 1 A. No.
- Q. Why not?
- 3 A. Controls can be placed away from the
- 4 carburetor, various positions, as long as they're
- 5 accessible to the operator and can be easily
- 6 used.
- 7 Q. Does it impact the likelihood that the
- 8 controls will break if they are located closer to
- 9 the carburetor?
- 10 A. No.
- 11 Q. Does it impact the manufacturing costs
- 12 if the controls are located closer to the
- 13 carburetor?
- 14 A. No. If they're close, you need
- 15 linkages, no matter what, whether it's close or
- 16 far away. You need rotating parts. So you'll
- 17 need a linkage, whether it's near the carburetor
- or located away from the carburetor.
- 19 Q. Does recessing the controls, as are
- shown on Honda's application, decrease the
- 21 possibility that the controls will be broken?
- 22 A. Recessing does not necessarily prevent
- breakage. When we design the engines, wherever
- 24 the controls are placed, we actually will test
- engines. We'll pull the rewind. We'll let the

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- 1 rewind snap back many a times, and determine
- whether the controls are in an adequate position.
- 3 Actually recessing the controls that you see
- 4 in the Honda might be detrimental to users. Some
- 5 users have heavy gloves or mittens, per se, and
- 6 that might be actually hard to open and close the
- 7 controls.
- Q. Are you aware of any alternatives to
- 9 the locations of the controls shown in Honda's
- 10 application?
- 11 A. Yes, I am.
- 12 Q. And could you turn, please, to
- 13 Applicant's Exhibit 17, the Kohler Command Pro 7.
- 14 A. Okay.
- 15 (Witness complies.)
- 16 Q. And to Applicant's Exhibit 21, the
- 17 Briggs Intek engine.
- 18 A. Okay.
- 19 (Witness complies.)
- Q. Do either of these engines in
- 21 Exhibits 17 or 21 have controls in a different
- location than where they are in Honda's
- 23 application?
- 24 A. Yes, they do. Some of them are
- 25 different.

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- 1 Q. And starting with the Kohler Command
- 2 Pro 7 in Exhibit 17, could you describe the
- 3 placement of the controls on that engine?
- 4 A. Sure. The speed control is located by
- 5 the decal where you see the rabbit and the
- 6 tortoise on the right-hand side of the lower
- 7 portion of the fuel tank.
- The choke and fuel shutoff, you can just see
- 9 the decal on the left-hand side of the carb
- 10 cover. So your choke is located within the carb
- 11 cover, and your fuel shutoff is located within
- 12 the carb cover.
- 13 Q. And on Applicant's Exhibit 21, where
- 14 are the controls located?
- 15 A. On the Intek 900, the controls are all
- located front-mounted, above the blower housing,
- 17 beneath the fuel tank. On the upper left side,
- beneath the fuel tank, you can see a red knob.
- 19 That's the fuel shutoff.
- Below the 900, where you see the two silver
- 21 bolts, that's the speed control that controls the
- 22 RPM, fast and slow. Beneath that is a red
- switch, which is actually a stop switch. The
- other choke control is located to the left of
- 25 the -- these controls, above the air cleaner

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- 1 element, beneath the silver bolt, mounting bolt.
- 2 That's a choke control that you slide laterally.
- Q. Did you prepare a demonstrative showing
- 4 the location of the controls on these engines as
- 5 compared to on the Honda application?
- 6 A. Yes, I did.
- 7 (Demonstrative of Honda GX
- 8 Controls and Alternative Control Locations
- 9 marked Applicant's Exhibit 46.)
- 10 BY MS. FRAZIER:
- 11 Q. Mr. Mieritz, you've been handed what's
- 12 been marked as Applicant's Exhibit 46. Is this
- 13 the demonstrative you prepared?
- 14 A. Yes, it is.
- 15 Q. Could you describe what's shown in this
- 16 demonstrative?
- 17 A. What I'm showing here are the Honda
- 18 controls and alternate control locations on two
- 19 competitive engines. On the left-hand side is
- 20 the Honda GX controls. Circled in red is the
- 21 speed control. You can see the red circles on
- 22 the Briggs Intek locate the speed control, which
- is on the right side of the engine, beneath the
- 24 fuel tank.
- On the Kohler Command Pro, the speed control

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- over there is also located beneath the fuel tank,
- 2 above the fan housing. The choke and fuel
- 3 shutoff on the Honda are circled in blue versus
- 4 the Intek engine, the choke is the red knob in
- 5 the center with the blue circle.
- 6 The choke -- that was -- excuse me, not the
- 7 choke. It's the fuel shutoff. The choke control
- 8 on the Briggs Intek is circled in blue on the
- 9 left-hand side. On the Kohler Command, the choke
- and the fuel shutoff are circled in blue,
- incorporated within the carb cover.
- 12 Q. In your opinion, do the differences you
- just described between the locations of the
- 14 controls in Exhibits 17 and 21, as compared to
- 15 the GX engine, have any impact on the performance
- 16 of those controls?
- 17 MR. HERRING: Objection. Foundation.
- 18 A. No. These do not have any effect on
- 19 the performance.
- Q. And, in your opinion, do any of the
- 21 differences you described, would they have any
- impact on the cost to manufacture the controls?
- MR. NOWAKOWSKI: Objection.
- 24 A. No. These variations that I've
- 25 described do not have an effect on the cost to

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- 1 manufacture.
- Q. Mr. Mieritz, you mentioned on
- 3 Applicant's Exhibit 17, a Kohler Command Pro 7 --
- 4 A. Yes.
- Q. -- the -- a sticker with a turtle and a
- 6 rabbit on it.
- 7 A. Yes.
- 8 Q. Do you see that?
- 9 A. Yes.
- 10 Q. In your experience, what does that
- 11 sticker mean?
- 12 A. That is your speed control, fast to
- 13 slow. Slow to fast.
- 14 Q. Is that a label that typically appears
- on these types of engines?
- MR. HERRING: Objection. Lacks
- foundation. Outside the scope of the expert
- 18 report.
- 19 A. That's an international label, yes, for
- 20 speed.
- Q. In addition to the components you just
- 22 discussed, did you consider the overall
- 23 appearance of the GX engine shown in Honda's
- 24 application in forming your opinions regarding
- 25 functionality?

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- 1 A. Yes, I did.
- Q. You made reference to some of the
- 3 complementary or -- lines and angles between
- 4 components.
- 5 A. Yes.
- Q. Did you prepare a demonstrative to show
- 7 those angles and lines?
- 8 A. Yes, I have.
- 9 (Demonstrative of Honda GX
- 10 Complementary Angles marked Applicant's
- 11 Exhibit 47.)
- 12 BY MS. FRAZIER:
- 13 O. You've been handed what's been marked
- 14 as Applicant's Exhibit 47. Is that the
- demonstrative you prepared?
- 16 A. Yes, it is.
- Q. Could you describe what's being shown
- in this demonstrative?
- 19 A. What I am depicting here in different
- 20 colors are lines, angles that are all used within
- 21 the Honda GX engine to complement the overall
- 22 cubic appearance of the engine.
- Q. What, if any, impact do those angles
- 24 and lines have on the performance of the GX
- 25 engine?

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- 1 A. These angles and lines do not have any
- effect on the performance of the GX engine.
- Q. What, if any, impact do the lines and
- 4 angles shown have on the quality of the GX
- 5 engine?
- 6 A. These angles and lines have no effect
- 7 on the quality.
- Q. What, if any, impact do these angles
- 9 have on the cost to manufacture the GX engine?
- 10 A. These angles and lines have no effect
- on the manufacturing cost.
- 12 Q. And what, if any, impact do these
- angles and lines have on the competitiveness of
- 14 the GX engine?
- 15 A. These angles and lines have no effect
- on the competitiveness of the GX engine.
- 17 (Expert Report of James Mieritz
- 18 marked Applicant's Exhibit 48.)
- 19 (Rebuttal Expert Report of James
- 20 Mieritz marked Applicant's Exhibit 49.)
- 21 (Supplemental Expert Report of
- James Mieritz marked Applicant's Exhibit 50.)
- 23 BY MS. FRAZIER:
- Q. Mr. Mieritz, you've been handed what
- 25 have been marked Applicant's Exhibits 48, 49, and

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- 1 50. Do you recognize these documents?
- MR. NOWAKOWSKI: Excuse me, do you have
- 3 another one?
- 4 MS. FRAZIER: I'm sorry. No. I only
- 5 have three.
- Q. Do you recognize these documents?
- 7 A. Yes, I do.
- 8 Q. Could you identify them, please?
- 9 A. These documents are cover sheets to my
- 10 expert report, cover sheet to my rebuttal report,
- 11 cover sheet to my supplemental expert report, and
- 12 attached to the back of each of these reports are
- 13 exhibits of materials I considered within those
- 14 reports.
- 15 Q. Looking at Exhibit 48 --
- A. Okay.
- 17 Q. -- among the materials listed here, did
- you consider the deposition testimony of Honda's
- 19 employee, Mr. Fujita, given in an earlier case
- 20 involving the GX engine?
- 21 A. Yes, I did.
- 22 Q. And are those some of the documents
- 23 listed with an AHGX label?
- 24 A. Yes, it is.
- Q. And did you also have the opportunity

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- 1 to review Mr. Fujita's deposition and trial
- 2 testimony from this case before submitting the
- 3 your supplemental expert report?
- 4 A. Yes, before I submitted the
- 5 supplemental report, I submitted his -- I
- 6 reviewed his latest deposition.
- 7 Q. You mentioned the term "overall cubic
- 8 design." Do you recall from Mr. Fujita's
- 9 testimony what Honda means by "overall cubic
- 10 design"?
- 11 A. Yes, I do.
- 12 Q. What do you understand Honda means by
- "overall cubic design"?
- MR. HERRING: Objection.
- 15 Q. You can answer.
- 16 A. The Honda management team was looking
- 17 at a concept of an overall cubic appearance for
- 18 the entire engine and also components within that
- 19 engine that gave it a cubic-appearing look.
- Q. And what aspects of the GX engine
- 21 contribute to that cubic look?
- MR. NOWAKOWSKI: I'm going to object to
- 23 that as a vague question.
- Q. Do you understand what I mean by what
- aspects contribute to the cubic look?

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- 1 A. I think I do.
- Q. What do you think I mean by that?
- 3 A. What components affect the cubic look.
- Q. Could you identify the components that
- 5 affect the cubic look?
- 6 MR. NOWAKOWSKI: I apologize. My --
- 7 the import of my objection was it was vague in
- 8 that you didn't specify whether you're asking him
- 9 about what Honda's opinions are, as set forth in
- 10 Mr. Fujita's deposition, or whether these are his
- opinions now.
- 12 BY MS. FRAZIER:
- 13 Q. Mr. Mieritz, based on your
- 14 understanding of Honda's definition of "overall
- 15 cubic design, " what aspects contribute to the
- 16 overall cubic design?
- 17 A. The aspects, components that contribute
- 18 to the overall cubic design of the Honda engine
- 19 are the fuel tank, the air cleaner cover, the fan
- 20 housing, and the carburetor cover.
- Q. Is Honda's definition of "overall cubic
- 22 design" the definition you applied when forming
- your opinions in this case?
- 24 A. Yes, it is.
- Q. Using that definition, what, if any,

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- 1 impact does the overall cubic design shown in
- 2 Honda's application have on the performance of
- 3 the engine?
- 4 A. It has no effect on the performance of
- 5 the engine.
- Q. What, if any, impact does the overall
- 7 cubic design shown in Honda's application have on
- 8 the quality of the engine?
- 9 A. The overall cubic design has no effect
- on the quality of the GX engine.
- 11 Q. What, if any, impact does the overall
- 12 cubic design shown in Honda's application have on
- 13 the cost to manufacture the engine?
- 14 A. The overall cubic design has no effect
- on the manufacturing cost of the engine.
- 16 Q. What, if any, impact does the overall
- 17 cubic design in Honda's application have on the
- 18 competitiveness of the engine?
- 19 A. The overall cubic appearance has no
- 20 effect on the competitiveness of the GX engine.
- Q. Is it necessary for an engine to have
- 22 roughly equal height and width in order to
- 23 compete effectively in the market?
- A. No, it isn't.
- Q. In your opinion, is it necessary for an

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- 1 engine to have a cubic look, like the one shown
- 2 in Honda's application in order to compete
- 3 effectively?
- 4 A. No, it doesn't.
- 5 Q. Is having the overall cubic design
- 6 shown in Honda's application needed to mate the
- 7 GX engine with the applications that it works in?
- 8 A. No.
- 9 MR. HERRING: Objection. Lacks
- 10 foundation. Outside the scope of the expert
- 11 report.
- 12 Q. Mr. Mieritz, you testified earlier as
- to applications that the GX engine is used in.
- 14 Correct?
- 15 A. Yes.
- 16 Q. And could you please answer the
- 17 question as to whether the overall cubic design
- shown in Honda's application is necessary to mate
- 19 the engine with those applications?
- A. No, it isn't. The mating takes place
- on the power takeoff side, and there is SAE
- 22 requirements for the mounting bolt pattern, the
- 23 mounting bolt locations, the finished surface on
- 24 the crank case cover, the bolt size to use, the
- 25 number of bolts, and also the crankshaft PTO

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- 1 dimensions.
- Q. And are those dimensions that you just
- 3 described visible in the application, Honda's
- 4 application?
- 5 A. No. That's not visible in the 2D view
- 6 of the Honda mark.
- 7 Q. Does the GX engine need to fit within
- 8 the application that it powers?
- A. Yes.
- 10 Q. In order to do that, is it necessary to
- 11 have the overall cubic design shown in the
- 12 application?
- 13 A. No, it's not necessary.
- 14 Q. Why not?
- 15 A. In my experience, I've seen quite a few
- 16 different sized engines that perform equally as
- well, taller engines, engines that have more
- width to it on the right, engines that have
- 19 components on the left that perform equally as
- 20 well as the Honda engine.
- Q. Are the applications the Honda engine
- 22 works with typically enclosed?
- A. No. Typically, these applications are
- 24 open applications.
- Q. Could you describe what you mean by

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- 1 "open applications"?
- A. Open applications, typically the
- 3 manufacturer has their -- their power end,
- 4 whatever it may, power washer, generator, the
- 5 engine is matched to it, mounted on a surface
- 6 plate. There may be a frame around the plate
- 7 that the operator uses as a handle to move, but
- 8 all of this is open framework, continually open
- 9 to the fresh air, and there's room for components
- 10 and accessories.
- 11 Q. Does the GX engine shown in Honda's
- 12 application have a compact design?
- 13 A. Yes, it does.
- Q. How do you define "compact"?
- 15 A. I define "compact" as being packaged
- 16 together neatly.
- 17 Q. Are there other compact engine designs
- that do not have the overall cubic appearance
- 19 shown in Honda's application?
- 20 A. Yes.
- Q. Does the overall cubic appearance in
- 22 Honda's application have any impact on the ease
- of packaging the engine?
- 24 A. In my experience with packaging, the
- package consists of a cardboard box, outside

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- shape. Between the engine and the cardboard box,
- 2 there typically are partitions on the sides, the
- front, top, to locate the engine so it won't be
- 4 damaged during shipment. There's clearance
- 5 between that partition and outside of the box.
- 6 The clearance there is enough to provide for
- 7 different shapes that we're talking about here,
- 8 within reason.
- 9 MR. HERRING: Object to the last
- 10 question and response as lacking foundation and
- outside the scope of the expert reports.
- 12 Q. Does the overall cubic appearance of
- 13 the GX engine in Honda's application have any
- impact on the ease with which the engine can be
- 15 maintained or serviced?
- A. No, it doesn't.
- 17 Q. Mr. Mieritz, returning for a moment to
- your experience during your more than 40 years at
- 19 Briggs & Stratton, did you do any benchmark
- 20 testing while at Briggs & Stratton?
- 21 A. Yes, we did.
- Q. What is benchmark testing?
- 23 A. Benchmark testing is looking at
- 24 competitors' engines or various components. I
- think the word "benchmark" comes from we'll look

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- 1 at the engine and then we'll tear it down. And
- on the bench, we're tearing the engine down. And
- 3 we look at each individual component, whether it
- 4 be the cylinder, piston, connecting rod, fuel
- 5 tank, disassembled. The engine will be
- 6 disassembled.
- 7 Q. And when you say "the engine," which
- 8 engines did you benchmark test against?
- 9 A. We benchmark tested almost all our
- 10 competition. And we continually do that on an
- ongoing basis. We benchmark tested Tecumseh,
- 12 Kohler, Onan, Robin, Kawasaki, Honda, Subaru,
- 13 many different variations, even some of the
- 14 Chinese engines.
- 15 Q. Did you benchmark test the Honda GX
- 16 engine?
- 17 A. Yes, we did.
- 18 Q. Based on that benchmark testing, were
- 19 you aware of any differences in the performance
- of Briggs and Vanguard's engines as compared to
- 21 the GX engine?
- MR. HERRING: Objection as outside the
- 23 scope of the expert reports.
- 24 A. Yes, I did.
- 25 Q. To the extent those tests revealed --

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- 1 let me ask you: Did those testing, that
- benchmark testing, reveal any differences between
- 3 Briggs and Vanguard's engines and the Honda GX
- 4 engine?
- 5 MR. HERRING: Same objection.
- 6 A. We used the benchmark testing on the
- 7 Honda engine early in our development of the
- 9-horsepower overhead valve engine, and our goal
- 9 was to have an engine that would be better or
- 10 equivalent to the Honda in respect to durability,
- startability, and reliability.
- 12 Q. Did the results of the test tell you
- whether, in fact, you were equivalent in terms of
- 14 those things?
- MR. HERRING: Same objection.
- 16 A. The results gave us a specification for
- 17 the Honda engines, and our engines actually met
- 18 that or exceeded that.
- 19 Q. Mr. Mieritz, are you aware of any
- 20 alternative designs to the overall cubic
- 21 appearance of the GX engine shown in Honda's
- 22 application?
- 23 A. Yes, I am.
- Q. Turning to Applicant's Exhibit 17.
- 25 A. Okay.

[Page 82] 1 Q. If you could look at Applicant's 2 Exhibits 17, 21, 23, 24, 43, 44. 3 (Yamaha Engines, MZ360 4 Specifications marked Applicant's Exhibit 51.) 5 BY MS. FRAZIER: 6 7 Q. And you've just been handed Applicant's 8 Exhibit 51. 9 Α. Okay. 10 Do you recognize that document? Q. 11 Yes, I do. Α. Could you identify it, please? 12 Q. 13 Exhibit 51? Α. 14 Q. Yes. 15 Α. Exhibit 51 is a new engine that just 16 recently came on the market. It's a Yamaha, 17 horizontal shaft, single cylinder, slant 18 cylinder, overhead valve engine. And which, if any, of the engines in 19 Q. 20 front of you do you consider to be alternative 21 designs to the overall cubic appearance of the GX 22 engine? 23 Α. Repeat the question again. 24 Q. Yes. Which, if any, of the engines in 25 front of you do you consider to have alternative

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- designs to the engine in Honda's application in
- 2 Exhibit 6?
- A. All of them.
- Q. And beginning with Exhibit 17, the
- 5 Kohler Command Pro 7, how does the appearance of
- 6 that engine compare to the overall appearance of
- 7 the GX engine in Honda's application?
- A. The appearance of this engine, to me,
- 9 compared with the Honda GX engine, has more of a
- 10 sloping leftward appearance to it. We've got a
- 11 rounded air cleaner. You've got a diagonal fuel
- 12 tank. There's lots of different lines that I'm
- seeing, compared to the Honda, which has
- 14 horizontal lines flowing across the tank, air
- 15 cleaner, lower housing, carburetor cover.
- 16 Q. In your opinion, what, if any, effect
- 17 do those differences you described have on engine
- 18 performance?
- 19 A. There should be no effect on engine
- 20 performance.
- Q. What, if any, effect to the differences
- you described have on engine quality?
- 23 A. There should be no effect on engine
- 24 quality.
- Q. And what, if any, of the differences

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- 1 you discussed have an effect on manufacturing
- 2 cost?
- 3 A. There should be no effect on cost,
- 4 manufacturing cost.
- 5 Q. Looking at the Briggs Intek engine in
- 6 Applicant's Exhibit 21, how does the overall
- 7 appearance of that engine compare to the overall
- 8 appearance of the engine in Honda's application?
- 9 A. Overall appearance of this engine, to
- me, is a taller engine, with the fuel tank
- 11 extending upward, above the air cleaner and
- 12 muffler. The appearance given is a tall engine.
- 13 Front panel air cleaner blends in with the fuel
- tank, so you've got lots of decaling on the
- 15 front.
- 16 The muffler on the back side is rounded
- softly to match the fuel tank, compared to the
- 18 Honda, which, again, is a -- horizontal lines, a
- 19 fuel tank air cleaner cover, carburetor cover and
- 20 fan housing, all complement each other. This is
- 21 more of a taller version of an engine.
- Q. And what, if any, impact would the
- 23 differences you just described have on engine
- 24 performance?
- 25 A. There should be no effect on engine

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- 1 performance.
- Q. What, if any, impact do the differences
- 3 you just described have on engine quality?
- 4 A. There would be no effect on engine
- 5 quality.
- Q. And what, if any, impact would the
- 7 differences you just discussed have on engine --
- 8 cost to manufacture the engine?
- 9 A. There should be no effect on the
- 10 manufacturing cost either.
- 11 Q. Moving on to Applicant's Exhibit 23,
- 12 how does the appearance of the Subaru engine in
- 13 Applicant's Exhibit 23 compare to the overall
- 14 appearance of the engine in Honda's application?
- 15 A. The overall appearance on this engine,
- to me, is the fuel tank is located above the fan
- 17 housing. The fuel tank has somewhat of a
- 18 rectangular look to it, with a protrusion on the
- 19 lower, right side of the fuel tank.
- Due to the air cleaner on the left side,
- 21 which is sloping, it gives a completely different
- look than what you see on the Honda GX engine.
- There are horizontal lines within this fuel tank,
- 24 air cleaner cover and elbow. But the lines do
- 25 not flow together, as they do on the Honda GX

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- 1 engine.
- The overall shape is similar, but because of
- 3 the horizontal lines moving up and down and the
- 4 squareness to the carb cover, it takes on a
- 5 different look.
- Q. What, if any, effect do the differences
- you just described have on the performance of the
- 8 engine?
- 9 A. There are no effects on the performance
- 10 of the engine.
- 11 Q. What, if any, effects do the
- 12 differences you just described have on the
- 13 quality of the engine?
- 14 A. The differences do not affect the
- 15 quality.
- 16 Q. And what, if any, impact do the
- 17 differences you just discussed have on the cost
- 18 to manufacture the engine?
- 19 A. The differences that I just described
- 20 do not affect the manufacturing cost.
- 21 Q. Moving on to Applicant's Exhibit 24,
- 22 how does the overall appearance of the Vanguard
- 9-horsepower engine in that exhibit compare to
- 24 the overall appearance of the engine in Honda's
- 25 application?

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- 1 A. This engine has the fuel tank mounted
- on top of the engine and the air cleaner mounted
- 3 in front of the fuel tank, above the rewind
- 4 housing at 9:00.
- 5 Looking on this engine, it -- you envision
- 6 that the engine has a large fuel tank and is top
- 7 heavy. It extends angularly down towards the
- 8 carburetor cover. So you have a -- it has a
- 9 styled feature that encompasses the fuel tank,
- 10 air cleaner cover, and the elbow that actually
- 11 blend in together with it. But the styling is
- more of a sharp, large beveled look to it.
- The muffler is actually located below, in
- 14 the lower, left quadrant of the engine. You can
- see some mounting bolts and it looks like a
- 16 muffler guard. So this muffler is actually
- mounted below the engine.
- 18 Completely different than the Honda GX,
- 19 where the air cleaner is mounted on top, left
- side. The fuel tank is mounted in the front, top
- 21 right side. You don't see the muffler on this
- 22 engine.
- The lines on the Honda engine are horizontal
- 24 lines with a beveling effect, where on the
- Vanguard engine, the lines are more a large

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- 1 chamfered look to it.
- Q. What, if any, effect do the differences
- 3 in appearance you just described have on the
- 4 performance of the engine?
- 5 A. The differences that I've described
- 6 have no effect on the performance.
- Q. What, if any, effect do they have on
- 8 the quality of the engine?
- 9 A. The differences have no effect on the
- 10 quality.
- 11 Q. And what, if any, effect do the
- 12 differences you've described have on the cost to
- 13 manufacture the engine?
- 14 A. The differences I described have no
- 15 effect on the engine -- the cost to manufacture.
- 16 Q. Turning to Applicant's Exhibit 43 --
- 17 A. Okay.
- 18 Q. -- how does the appearance of the
- 19 Kawasaki engine in Applicant's Exhibit 43 compare
- 20 to the overall appearance of the engine in
- 21 Honda's application?
- 22 A. The Kawasaki 8-horsepower engine has an
- 23 appearance where the fuel tank is located on the
- entire top side. So it actually looks heavy,
- 25 similar to the Vanguard 9-horsepower. The

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- 1 controls are located beneath the fuel tank at the
- 2 12:00 position of the rewind.
- 3 The air cleaner is mounted front side, which
- 4 is a panel mount. It has large radii, a soft
- 5 look to it, two large knobs that hold the air
- 6 cleaner cover on. The fuel shutoff is located
- 7 between the carburetor -- between the air cleaner
- 8 cover and the rewind housing, fan housing. The
- 9 controls, like I said, are speed is front, choke
- 10 is front. Off/on switch is front.
- 11 Compared to the Honda engine, the fuel tank
- is located on the right side, rectangular in
- 13 shape. The air cleaner cover is located on the
- 14 left side, upper left side, held on by a wingnut,
- 15 square in shape, horizontal lines running between
- 16 the air cleaner cover and fuel tank, with
- 17 beveling on the top side of the fuel tank and the
- 18 air cleaner cover. Horizontal lines complement
- 19 the blower housing, fuel tank, air cleaner cover
- 20 and the carb cover.
- Q. What, if any, effect do the differences
- 22 you just described have on the performance of the
- 23 engine?
- 24 A. Performance is not affected by what I
- 25 just described.

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- Q. What, if any, effect do the differences
- 2 you just described have on the quality of the
- 3 engine?
- 4 A. Quality is not affected by what I just
- 5 described.
- Q. What, if any, effect of the
- 7 differences -- excuse me.
- What, if any, impact do the differences you
- 9 just described have on the cost to manufacture
- 10 the engine?
- 11 A. Manufacturing cost is not affected by
- 12 what I just described.
- Q. And what, if any, effect do the
- 14 differences you just discussed have on the
- 15 competitiveness of the engine?
- 16 A. Competitiveness is not affected by what
- 17 I just described.
- 18 Q. How does the overall appearance of the
- 19 Kohler Command Pro 6 in Applicant's Exhibit 44
- 20 compare to the overall appearance of the GX
- 21 engine in Honda's application?
- 22 A. The overall appearance is packaged
- 23 together nice. The fuel tank has more of a
- 24 rectangular look with huge beveling on the top.
- 25 This particular Kohler Command Pro 6 has a

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- 1 horizontal seam running length-wise across the
- fuel tank. The fuel tank bottom, you can see,
- 3 has a horizontal line, but it dips slightly
- 4 downward to give it an appearance of adding more
- 5 capacity on the lower left side.
- 6 The appearance of the air cleaner cover is
- 7 squarish, with radii edges to match the edges of
- 8 the fuel tank. The left side of the engine has a
- 9 vertical line running straight down, again, to
- 10 match some of the lines of the fuel tank. And
- 11 then you can see the carburetor cover, as I
- 12 mentioned before, blends in with the fan housing,
- 13 has an angular shape to it.
- 14 Compared to the Honda, which has more
- 15 horizontal lines running across the fuel tank,
- and air cleaner cover at the top, again, has
- 17 beveling. The bottom of the fuel tank is one
- 18 continuous horizontal line. The carb cover has
- 19 horizontal features to it that all complement the
- 20 look of the Honda engine.
- Q. What effect, if any, do the differences
- 22 you just described have on the performance of the
- 23 engine?
- 24 A. Performance is not affected by what I
- 25 just described.

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- Q. What, if any, effect do the differences
- 2 you just described have on the quality of the
- 3 engine?
- 4 A. The quality, by what I just described,
- 5 is not affected.
- Q. And what, if any, effect do the
- 7 differences you just described have on the cost
- 8 to manufacture the engine?
- 9 A. Manufacturing cost is not affected by
- what I just described.
- 11 Q. Finally, looking at Applicant's
- 12 Exhibit 51 --
- 13 MR. HERRING: Object to 51 as outside
- 14 the scope of the expert reports.
- 15 BY MS. FRAZIER:
- 16 Q. Mr. Mieritz, how does the overall
- 17 appearance of the engine in Applicant's
- 18 Exhibit 51 compare to the overall appearance of
- 19 the GX engine?
- 20 A. The appearance of the engine in
- 21 Exhibit 51 portrays a fuel tank located on top of
- 22 the engine, and it extends from the right side to
- the left side, over the cylinder head. The fuel
- 24 tank is more -- is a thin rectangle, with the
- lower left side having a slope to it.

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- 1 There's large radii on the top portion of
- 2 the tank, which give it a rounded look. The seam
- 3 on the tank is approximately in the middle,
- 4 running horizontally. The carburetor air cleaner
- 5 cover is located on the front of the engine,
- flush with the rewind. It's a panel mount air
- 7 cleaner. It has a rectangle appearance, held on
- 8 by two mounting bolts on the top and the bottom.
- 9 The fan housing, which you can't see very
- 10 clear, seems to be from the 12:00 position,
- 11 running radially down to the 5:00. There seems
- 12 to be a horizontal intersection. And then I'm
- assuming it goes upwards towards the slanted
- 14 cylinder, similar to the other engines that we
- 15 depicted.
- 16 Controls are located -- you can see the fuel
- 17 shutoff control is located between the air
- 18 cleaner and fan housing. To the right of that is
- 19 the speed control, where you see the rabbit and
- 20 tortoise, and I would suspect the choke control
- is located somewheres where we can't see it, but
- 22 close to the fuel shutoff.
- 23 Comparing this to the Honda, Honda engine,
- 24 again, has a fuel tank located on the top right
- side, the air cleaner located on the top left

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- 1 side. The fuel tank is rectangular. Air cleaner
- is square-looking. Air cleaner and fuel tank
- 3 have horizontal lines. Fuel tank has horizontal
- 4 lines, top and bottom, beveled top surface that
- 5 match the beveled top surface of the air cleaner
- 6 cover. The fan housing has horizontal lines, top
- 7 and bottom that complement the fuel tank and air
- 8 cleaner cover and the carburetor cover.
- 9 Q. What, if any, effect do the differences
- 10 you just described have on the performance of the
- 11 engine?
- 12 A. The differences I've described have no
- 13 effect on performance.
- 14 Q. What, if any, effect do the differences
- 15 you just described have on the quality of the
- 16 engine?
- 17 A. The differences I described have no
- 18 effect on engine quality.
- 19 Q. What, if any, effect do the differences
- you just described have on the cost to
- 21 manufacture the engine?
- 22 A. The differences I described have no
- 23 differences on the manufacturing cost.
- Q. When was the engine shown in
- 25 Applicant's Exhibit 51 introduced to the market?

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- 1 MR. HERRING: Object to the form.
- 2 A. I think it was just --
- MR. NOWAKOWSKI: Okay.
- Q. Mr. Mieritz, do you recall the first
- 5 time you encountered the engine in Applicant's
- 6 Exhibit 51?
- 7 A. Yes.
- 8 Q. When was that?
- 9 A. I saw it in a trade magazine
- 10 approximately three or four months ago.
- 11 Q. Was that before or after you submitted
- 12 your supplemental report in this case?
- 13 A. After.
- Q. Mr. Mieritz, are you aware that Honda
- 15 recently updated the design of the GX engine?
- 16 A. Yes, I am.
- 17 Q. What, if any, changes did Honda make to
- 18 the external appearance of the GX engine, as a
- 19 result of that update?
- 20 A. Honda made four changes to the external
- 21 appearance. They changed the beveling on the top
- 22 of the fuel tank and the air cleaner to soften
- 23 the beveling. They removed the ribs that you see
- on the carburetor cover. They added a skirt
- 25 beneath the right-hand side of the air cleaner

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- 1 cover. There's one more I can't think of.
- Q. In your opinion, did any of the changes
- you've just named alter the overall appearance?
- A. Oh, excuse me, the height of the fuel
- 5 tank was increased to match the -- somewhat match
- 6 the top of the air cleaner cover.
- 7 Q. In your opinion, did any of the changes
- 8 you just described alter the overall appearance
- 9 of the GX engine?
- 10 A. No. The same overall appearance is
- 11 portrayed with these changes.
- 12 Q. During your time at Briggs & Stratton,
- did you have an opportunity to speak with any
- OEMs, distributors or dealers about competitors'
- 15 engines?
- 16 A. Yes, I did.
- 17 Q. For what purpose?
- 18 A. We would -- I would go to the OEMs,
- 19 distributors and dealers with our sales and
- 20 marketing people periodically. I was there
- 21 usually with a new engine or we're trying to get
- 22 a new customer. I was there as engineering
- 23 support.
- Q. Approximately how many times did you
- 25 speak to OEMs, distributors or dealers about

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- 1 competitor engines during your time at Briggs?
- A. OEMs, I visited approximately 20 times.
- 3 Distributors, maybe ten times. Dealers, I would
- 4 often go off on my own and talk to dealers. And
- 5 it might be over 100 times.
- 6 Q. Did you ever discuss the Honda GX
- 7 engine in any of those conversations?
- A. Yes, we did.
- 9 Q. Based on those conversations, did you
- develop an understanding of the perception of the
- 11 GX engine in the industry?
- 12 A. Yes, I did.
- Q. What was that understanding?
- MR. HERRING: Objection.
- 15 A. Okay. Perception that I developed in
- 16 discussions with these customers was that the
- 17 Honda engine was looked at and perceived as the
- 18 number-one engine in the industry, with respect
- 19 to performance and durability and startability.
- Q. Based on those conversations, did you
- observe the extent to which people in the
- industry recognized the look of the GX engine?
- MR. NOWAKOWSKI: Objection.
- 24 Foundation.
- 25 A. Yes. I discussed with them the overall

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- look of engines.
- Q. And what was your observation with that
- 3 respect?
- 4 MR. NOWAKOWSKI: Same objection.
- 5 A. In discussing with them and even
- 6 colleagues, it became apparent that the Honda
- 7 engine, the overall look was easily identified
- 8 throughout the industry.
- 9 Q. Based on your --
- MR. NOWAKOWSKI: I'd also object on
- 11 hearsay grounds.
- 12 Q. Based on your observations, was the
- appearance of the GX engine the reason it was
- 14 preferred?
- MR. HERRING: Objection.
- MR. NOWAKOWSKI: Objection.
- 17 Foundation. Hearsay.
- MR. HERRING: Vague.
- MS. FRAZIER: Let me rephrase.
- Q. Based on your observation, was the
- 21 appearance of the GX engine one of the reasons
- that it was, as you described, number one?
- MR. NOWAKOWSKI: Same objections.
- A. No. Appearance had nothing to do with
- 25 that.

[Page 99] 1 MS. FRAZIER: Thank you. I have no 2 further questions, Mr. Mieritz. 3 MR. NOWAKOWSKI: Can we take a few 4 minutes to move the papers around? 5 MS. FRAZIER: Sure. Switch sides. 6 (A recess was taken.) 7 CROSS-EXAMINATION 8 BY MR. NOWAKOWSKI: 10 Mr. Mieritz, as you might recall, I'm Q. 11 Ken Nowakowski. I represent Kohler --12 Α. Yes. 13 -- in this opposition. We also have 14 Seth Herring here, who represents Briggs & Stratton. 15 16 Α. Yes. 17 You've met us before. Correct? Q. 18 Yes, I did. Α. As a matter of fact, I took your 19 Q. 20 deposition in June of this year? 21 Α. Yes, you did. 22 Q. Do you remember that? 23 Α. Yes. 24 By the way, during that deposition, you 25 were sworn under oath, as you were today. Right?

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- 1 A. Yes.
- Q. And you were sworn to tell the truth.
- 3 Correct?
- 4 A. Yes.
- Q. Just as if you were appearing in front
- of a judge and a jury. Correct?
- 7 A. Yes.
- 8 Q. And you did tell the truth?
- 9 A. Yes.
- 10 Q. All right. We're here to talk about
- 11 the Honda trademark application, which I believe
- 12 has been marked as Applicant No. 6. Is that
- 13 right?
- 14 A. Correct.
- 15 Q. And that trademark application is for
- the configuration of the Honda GX engine.
- 17 Correct?
- 18 A. Yes, it is.
- 19 Q. And the GX engine is a general-purpose
- 20 single-incline cylinder, horizontal shaft,
- 21 internal combustion engine. Is that right?
- 22 A. Yes, it is.
- Q. And you've defined the general-purpose
- 24 internal combustion engine as an engine that can
- 25 be used in various applications. Right?

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- 1 A. Correct.
- Q. And you've testified today on direct
- 3 examination as to what some of those applications
- 4 are. Correct?
- 5 A. Yes, I have.
- 6 Q. What is an inclined cylinder engine?
- 7 A. In the industry, we talk about inclined
- 8 versus in-line. In the particular case, the
- 9 cylinder bore is slanted on a 25-degree angle on
- 10 the Honda GX engine. In the industry, the slant
- 11 can be different angles or it can be in a
- 12 vertical line.
- 13 Q. And is it fair to say that use of an
- 14 incline cylinder engine in a general -- excuse
- 15 me. Withdraw that.
- 16 Is it true that the use of an incline
- 17 cylinder in a general-purpose engine allows the
- 18 manufacturer or designer to make that engine
- 19 shorter in height?
- 20 A. Possibly. Yes.
- Q. Now, on direct examination, you recall
- you gave some testimony regarding your
- 23 understanding of Honda's definition of the
- 24 overall cubic design of the Honda GX engine?
- 25 A. My understanding of Honda's overall

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- 1 cubic design?
- 2 Q. Your understanding of how Honda uses
- 3 the term "overall cubic design." You've
- 4 testified to that on direct examination.
- 5 Correct?
- A. Yes. Yes.
- Q. And, in fact, it's your opinion that,
- 8 and your understanding of the definition of --
- 9 withdraw that.
- 10 It's your understanding that Honda uses the
- 11 term "overall cubic design" to mean the
- 12 approximately equal width and height of the GX
- 13 engine when viewed from the perspective shown in
- 14 the application at issue, as well as the overall
- 15 visual cubic impression of the engine created by
- 16 the relative position, shape, size, and
- orientation of the major GX engine components.
- 18 Correct?
- 19 A. Are you reading from my deposition?
- Q. I'm reading from your rebuttal report
- 21 dated 11/21/12.
- 22 A. Okay. The overall cubic design
- 23 appearance that Honda has portrayed to me is an
- 24 appearance of the overall engine, which
- encompasses various components within that engine

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- 1 that provide that look.
- Q. Sure. So when you -- so you, in fact,
- 3 stated in your rebuttal report dated 11/21/2012,
- 4 that in the context of the GX engine trademark
- 5 that is the subject of this proceeding, I
- 6 understand that Honda maintains that cubic design
- 7 refers to the approximately equal width and
- 8 height of the GX engine when viewed from the
- 9 perspective shown in the application at issue, as
- well as the overall visual cubic impression of
- 11 the engine created by the relative position,
- shape, size, and orientation of each of the major
- 13 GX engine components.
- 14 A. Correct.
- 15 Q. And that's still your understanding
- 16 today. Correct?
- 17 A. Yes, it is. Yes, it is.
- Q. And that's the understanding upon which
- 19 you base your opinions in this case. Correct?
- 20 A. Yes, it is.
- 21 Q. So based on that understanding, the --
- 22 what you referred to as the two-dimensional
- 23 trademark application shown on Exhibit --
- 24 Applicant Exhibit No. 6, is created, in part, by
- 25 the relative position, shape, size, and

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- orientation of the major GX engine components
- which are three-dimensional objects. Right?
- 3 MS. FRAZIER: Objection. Vague.
- 4 A. Can you restate that?
- 5 O. Sure. I'll restate that. So it's true
- 6 that your understanding of the overall cubic
- 7 design of the GX engine, which you say is
- 8 two-dimensional in the trademark, right? I'll
- 9 withdraw that. Gee whiz.
- You've testified that you believe that the
- 11 trademark application for the configuration of GX
- 12 engine is for a two-dimensional configuration.
- 13 Correct?
- 14 A. That's correct.
- 15 Q. But based on your understanding of
- 16 Honda's definition of overall cubic design, that
- two-dimensional overall cubic appearance is
- 18 created by the position, shape, size, and
- 19 orientation of the three-dimensional component
- 20 parts which make up the major external components
- of the GX engine. Correct?
- 22 A. I think I understand your question. I
- 23 think the answer to that is yes.
- Q. All right. It's your opinion,
- 25 Mr. Mieritz, that a goal of a designer of a

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- 1 general-purpose internal combustion engine like
- 2 the GX is to design an engine with a small
- 3 footprint or envelope. Correct?
- 4 A. The footprint is a standard. So that
- 5 standard is used throughout the industry, whether
- 6 it's a small 5-horsepower or a small
- 7 8-horsepower. Footprints are different.
- Q. Okay. It's your opinion that the goal
- 9 of a designer of a general-purpose internal
- 10 combustion engine like the GX is to design a
- small engine. Correct?
- 12 A. Correct.
- 13 Q. And engine designers design
- 14 general-purpose internal combustion engines to be
- 15 small so that original equipment manufacturers,
- or OEMs, can fit them into their equipment.
- 17 Correct?
- 18 A. That's one of the reasons an engine is
- 19 designed small.
- Q. In fact, it's your opinion that OEMs in
- 21 the general-purpose internal combustion engine
- 22 market ask for a small engine, and it's the
- engineer's job to try to accommodate them.
- 24 Correct?
- 25 A. They do ask for a small engine. That's

[Page 106]

- a general question that comes up all the time.
- 2 But they do not necessarily enforce that.
- Q. But it certainly is the engineer's job,
- 4 in your opinion, to try to accommodate them when
- 5 they ask for it. Right.
- A. The engineer's job, yes, is to design
- 7 as small a package as it can.
- Q. And it's also your opinion that a
- 9 company which puts a smaller engine in the market
- 10 than its competition could have a market
- 11 advantage. Correct?
- 12 A. Small does not define the market
- advantage, but it could be one point in an
- 14 advantage. Yes.
- 15 Q. And based on your experience, I think
- you've testified some 40 years' with Briggs &
- 17 Stratton as an engine designer, the small size of
- 18 a manufacturer's general-purpose internal
- 19 combustion engine could be a differential in the
- 20 market for general-purpose engines. Correct?
- 21 A. The small size can be a determining
- factor, but is not always necessarily that.
- Q. Also based on your long experience as
- 24 an engine designer, the styling of an engine
- occurs at a later stage of an engine's

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- development program. Correct?
- A. Yes. As I mentioned, it occurs after
- 3 the external components are usually added on the
- 4 engine, and you have drawings or prototype
- 5 available.
- 6 Q. So the styling of an engine usually
- 7 begins after the engine layout is complete and
- 8 prototype fabrication is started. Right?
- 9 A. Correct.
- 10 Q. Now, before you rendered your opinions
- in this matter, you never spoke with anyone in
- 12 Honda's styling group regarding the design of the
- 13 GX engine. Is that right?
- 14 A. That is correct.
- 15 Q. And before you rendered your opinion in
- 16 this matter, you never spoke with anyone who
- identified themselves as some third-party
- designer of the GX engine. Is that correct?
- 19 A. That is correct.
- Q. And, in fact, before you rendered your
- 21 opinions in this matter, you never talked to any
- 22 engineer at Honda involved with the design of the
- 23 Honda GX engine. Is that right?
- 24 A. The design or the styling?
- Q. The design.

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- 1 A. That's correct.
- Q. Nor did you speak with anybody at Honda
- 3 before your opinions regarding the styling of the
- 4 engine?
- 5 A. That's correct also.
- 6 Q. Now, you've heard of the gentleman
- 7 named Motohiro Fujita. Correct?
- 8 A. Yes.
- 9 Q. And you testified a little bit about
- 10 that on your direct examination. Right?
- 11 A. Yes, I did.
- 12 Q. And you -- I think you said that before
- 13 you rendered your first opinions, you had
- 14 Mr. Fujita's deposition from an earlier case. Is
- 15 that right?
- 16 A. My first opinions on this case? Yes.
- 17 Q. Yes.
- 18 A. Yes, it was.
- 19 Q. Now, you've rendered -- you know that
- 20 he's testified in this matter. Is that right?
- 21 A. Yes.
- 22 Q. And he's testified that he was involved
- in the development of the GX engine. Is that
- 24 right?
- 25 A. Yes. In the 1980s.

[Page 109]

- 1 Q. He's also testified in his deposition
- 2 that he was not a member of the styling group.
- 3 Is that right?
- 4 A. To my -- best of my knowledge, yes. He
- 5 was an engineer, not a stylist.
- Q. And by -- I just want to be clear.
- 7 Based on his testimony, it's your understanding
- 8 that he was not a member of Honda's styling group
- 9 on the GX engine project?
- 10 A. That's my understanding.
- 11 Q. And he's given a deposition in this
- 12 case. Correct?
- 13 A. Yes, he has.
- 14 Q. Before you rendered your opinions,
- 15 however, you've never spoken with Mr. Fujita,
- 16 correct?
- 17 A. No. I haven't.
- Q. And you knew that he was identified as
- 19 the -- as an engineer involved in the development
- of the GX engine at Honda. Correct?
- 21 A. Yes, I did.
- Q. And you've never taken the opportunity
- to talk to Mr. Fujita about the development and
- 24 styling of the GX engine before you rendered your
- opinions in this case?

[Page 110]

- 1 A. No. I've never met the gentleman and
- 2 I've never talked to him.
- Q. Did you ask to talk to him?
- 4 A. No, I haven't.
- 5 Q. You didn't think it was important?
- 6 A. No.
- 7 Q. Because you had the testimony that he
- 8 gave in a prior case and then later had the
- 9 testimony that he gave in this case. Right?
- 10 A. In the early case, the Pep Boy case, I
- didn't see his deposition until after I created
- my report.
- Q. Okay. So even as to your first report,
- 14 you did not see his Pep Boy --
- 15 A. Correct.
- 16 Q. -- testimony until after you rendered
- 17 that report. Correct?
- MS. FRAZIER: Objection. Misstates
- 19 testimony.
- 20 A. Correct.
- 21 Q. Now, before you rendered your opinions
- in this matter, you never reviewed any documents
- 23 identified as having been authored by anyone in
- 24 Honda's styling group with respect to the GX
- engine. Is that correct?

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- 1 A. That is correct.
- Q. And before you rendered your opinions
- 3 in this matter, you did not review any documents
- 4 authored by any third-party industrial designers
- 5 hired by Honda with respect to the styling of the
- 6 GX engine. Correct?
- 7 A. That is correct.
- 8 Q. So none of your opinions in this matter
- 9 were based on any documents authored by someone
- 10 either in Honda's styling group for the GX engine
- or someone hired by Honda on the GX project from
- 12 an outside industrial design company. Correct?
- 13 A. That is correct.
- Q. Now, you did review one document that
- 15 was an internal document generated by Honda and
- 16 produced in this case with regard to the
- 17 development of the GX engine. Is that correct?
- 18 A. Which one are you referring to?
- 19 Q. Well, I'm referring specifically with
- 20 respect to Exhibit 191-A in Mr. Fujita's
- 21 deposition, trial deposition in this case.
- 22 A. Yes. I reviewed that.
- Q. And that was part of the exhibits of
- 24 Mr. Fujita's deposition that you've identified as
- being one of the items that you looked at prior

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- 1 to rendering your final opinions in this case.
- 2 Right?
- 3 A. Yes.
- Q. Now, based on your review of
- 5 Mr. Fujita's testimony, do you understand that
- 6 this document relates to the planning and
- 7 development of the GX engine at Honda?
- 8 A. From the early 1980s, yes.
- 9 Q. Well, it's got a date on it of
- 10 October 31, 1981 on the front page. Is that
- 11 correct? I'm sorry. It's on the second page.
- 12 The first --
- 13 A. October 31 on the first page of the
- 14 document. Yes.
- 15 Q. October --
- 16 A. 1981.
- 17 Q. I'm sorry. I'm talking over you. We
- have to be careful, Mr. Mieritz, that we don't
- 19 talk over each other.
- 20 So let the record be clear that your
- 21 testimony is that the date that appears on the
- second page of Exhibit No. 191-A is October 31,
- 23 1981. Correct?
- 24 A. Yes. October 1st (sic), 1981.

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- 1 A. October 31, 1981.
- Q. Okay. And your understanding is --
- 3 based on Mr. Fujita's testimony, is that's the
- 4 time frame during which Honda was developing the
- 5 GX engine. Correct?
- 6 A. Yes. That's what I understand.
- 7 Q. And just so the record is clear,
- 8 Exhibit 191-A, which you've got in front of you,
- 9 has some number designations in the bottom,
- 10 right-hand corner of each page which shows the
- 11 production numbers, and I just want to make clear
- 12 that if you start at the front page,
- 13 Exhibit 191-A goes from AHGX, all in caps,
- 14 0057924 to 0057951. Is that correct?
- 15 A. Yes. I see that.
- 16 Q. All right. So I may reference some of
- 17 those pages as we're talking Exhibit 191-A. Fair
- 18 enough?
- 19 A. That's okay.
- Q. All right. It's your understanding
- 21 that at the time that the document identified as
- Fujita Exhibit 191-A, this planning document or
- 23 relating to the GX engine, Honda already had a
- 24 general-purpose engine in the marketplace called
- 25 the ME. Is that right?

[Page 114] 1 To my understanding, yes, they had an Α. 2 I don't really know the designation, but engine. 3 they had a prior engine. And you know that independently of this 4 Q. document, because you were working for Briggs & 5 6 Stratton at that time, and you were aware of 7 engines in the marketplace. Right? 8 Α. Yes, I was. 9 And on Page 0057926, Honda describes © Q. 10 Confidential: Attorney's Eyes Only 11 Confidential: Attorney's Eyes Only Is that fair to 12 say? 13 Quickly looking at this, it's entitled Α. 14 Confidential: Attorney's Eyes Only 15 Confidential: Attorney's Eyes Only 16 Confidential: Attorney's Eyes Only Yes. 17 Okay. And, in fact, Honda tells us, Q. 18 and told you when you reviewed this, that it had 19 this engine called the ME, which was a 20 general-purpose engine in the marketplace. 21 Right? 22 Α. Honda didn't tell me that. Confident 23 Confide 24 Q. Confidential: Attorney's Eyes Only

Α.

Confid

25

	[Page 115]
1	Q. And, in fact, that, according to Honda
2	on this document, Confidential: Attorney's Eyes Only
3	Confidential: Attorney's Eyes Only Confident
4	A. Confidential: Attorney's Eyes Only
5	Confidential: Attorney's Eyes Only
6	Q. Confidential: idential: Attorney's Eyes Only
7	Confidential: Attorney's Eyes Only
8	Confidential: Attorney's Eyes Only
9	Confidential:
10	A. Confidential: Attorney's Eyes Only
11	Confidential: Attorney's Eyes Only
12	Confidential: Attorney's Eyes Only
13	Confidential:
14	Q. So based on this document that you
15	reviewed in connection with your opinions, Confide
16	Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only Is that correct?
18	A. That's correct.
19	Q. And at that time, when they're
20	developing the GX, they said in this document
21	Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Eyes Only
23	Confidential: Attorney's Eyes Only
24	Confidential: Attorney's Eyes Only
25	Confidential: Attorney's Eyes Only

	[Page 116]
1	Correct?
2	A. I see that in the document. Yes.
3	Q. That's what Honda said?
4	A. Yes.
5	Q. And Honda also said that Confidential:
6	Confidential: Attorney's Eyes Only
7	Confidential: Attorney's Eyes Only
8	Confidential: Attorney's Eyes Only
9	Confidential: Attorney's Eyes Only
10	Confidential: That's what they said. Correct?
11	A. I see that also.
12	Q. And this is a document you reviewed in
13	connection with your opinions in this case?
14	A. Yes.
15	Q. Now, I'd ask you to turn to
16	Page 0057927 in Exhibit 191-A. And you see a
17	page there entitled Confidential: Attorney's Eyes Only
18	Confidential: Correct?
19	A. Yes. I see that.
20	Q. And there again, there's a discussion
21	of Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Confidential:
23	A. Confid
24	Q. Confidential: Attorney's Eyes Only
25	Confidential: Attorney's Eyes Only

	[Page 117]
1	Confidential: Attorney's Eyes Only
2	Confidentia
3	A. Yes.
4	Q. And, in fact, under Confidential:
5	Confidential: Attorney's Eyes Only
6	Confidential: Attorney's Eyes Only
7	Confidential: Correct?
8	A. Yes.
9	Q. It says, Confidential: Attorney's Eyes Only
10	Confidential: Attorney's Eyes Only
11	Do you see that?
12	A. Yes, I do.
13	Q. So it's your understanding from reading
14	this development document regarding the GX that
15	Confidential: Attorney's Eyes Only
16	Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only
18	Confidential: Attorney's Eyes Only Is that
19	right?
20	A. Confidential: Attorney's Eyes Only
21	Confidential:
22	Q. I'll withdraw that question.
23	Honda, in this document, Confidential: Attorney's e
24	Confidential: Attorney's Eyes Only
25	Confidential: Attorney's Eyes Only

	[Page 118]
1	Confidential: Attorney's Eyes Only
2	A. What this document is telling me, Confid
3	Confidential: Attorney's Eyes Only
4	Confidentia
5	Q. Okay. So when they use the term
6	Confidential: Attorney's Eyes Only
7	A. Confidential: Attorney's Eyes Only
8	Confidential:
9	Confidential: Attorney's Eyes Only
10	Confidential: Attorney's Eyes Only
11	Confidentia
12	Q. Confidential: Attorney's Eyes Only
13	Confidential: Attorney's Eyes Only Do you see that?
14	A. Yes, I do.
15	Q. And do you see that Confidential: Attorney's
16	Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only
18	you see that?
19	A. Yes, I do.
20	Q. What do you understand by Confidential:
21	Confident C
22	A. In my experience, you can ship engines
23	single carton or in a pallet carton. And I think
24	here they're talking about, they're looking at
25	Confidential: Attorney's Eyes Only

[Page 119] 1 Confidential: Attorney's Eyes Only 2 Q. And if you -- and what they're saying 3 is if -- Confidential: Attorney's Eyes Only 4 Confidential: Attorney's Eyes Only 5 Confidential: Attorney's Eyes Only 6 Confident Right? 7 MS. FRAZIER: Objection. Calls for 8 speculation. 9 THE WITNESS: Can I answer? 10 Q. You may answer. 11 One of the goals was Confidential: Attorney's Α. 12 Confidential: Attorney's Eyes Only 13 Confidential: Attorney's Eyes Only But that was the 14 goal. 15 And that makes sense, based on your 40 Q. 16 years of experience as an engine designer? 17 Confidential: Attorney's Eyes Only Α. Sure. Confidential: Attorney's Eyes Only 18 Conf 19 Confidential: Attorney's Eyes Only 20 Confidential: 21 0. And then, Mr. Mieritz, I'd ask you to 22 take a look at Page No. 0057929, please. 23 (Witness complies.) 24 Α. Okay. 25 Q. And on that document, Confidential:

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1 Confidential: Attorney's Eyes Only Do you see
2 that?
3 A. Yes, I do.
Q . Confidential: Attorney's Eyes Only
5 Confidential: Attorney's Eyes Only
6 Confidential: Attorney's Eyes Only Confident
7 Confidential: Attorney's Eyes Only
8 Confidential: Attorney's Eyes Only Do you see that?
9 A. Yes, I do.
Confidential: Attorney's Eyes Only
Confidential: Attorney's Eyes Only
12 Confidential: Attorney's Do you see that?
13 A. Yes, I do.
Q. And, in fact, the document, itself,
this particular page, Confidential: Attorney's Eyes Only
Confidential: Attorney's Eyes Only
17 A. Correct.
18 Q. And as a design engineer for engines
19 for over 40 years, you would understand Conf
Confidential: Attorney's Eyes Only
Confidential: Attorney's Eyes Only
Confidential: Attorney's Eyes Only
23 Confidential:
MS. FRAZIER: Objection. Calls for
25 speculation.

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- 1 Q. Correct?
- MS. FRAZIER: You may answer.
- 3 A. I'm sure I understand some of the
- 4 terms.
- 5 Q. But you'd understand, as a design --
- 6 someone with 40 years of design experience,
- 7 taking a look at this planning document, Confidential:
- 8 Confidential: Attorney's Eyes Only
- 9 Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only Correct?
- MS. FRAZIER: Same objection.
- 13 A. I would assume that that's why they had
- 14 that column. Yes.
- 15 Q. And as a design engineer for over 40
- 16 years, in fact, when you designed engines, you'd
- often look at your objectives and then the
- 18 technical means for obtaining those objectives.
- 19 Right?
- 20 A. I don't think I would ever put it that
- 21 way, that I would look at my objectives and
- 22 technical means when I was designing engines. I
- 23 had a goal. I had a specification, and we may
- 24 have had meetings on how we're going to design
- the engine. I don't know if it was specifically

	[Page 122]
1	this type of document. But we would discuss
2	things of that nature. Yes.
3	Q. Okay. So, in your experience designing
4	engines, you would come up with goals and then
5	discuss ways to achieve those goals?
6	A. Yes.
7	Q. And it might not be in the specific
8	format as shown on Page 0057929 of
9	Exhibit No. 191-A, but you would recognize what
10	is shown on that page Confidential: Attorney's Eyes Only
11	Confidential: Attorney's Eyes Only Correct?
12	MS. FRAZIER: Objection.
13	A. Yes. I can understand the document.
14	Q. All right. Confidential: Attorney's Eyes
15	Confidential: Attorney's Eyes Only
16	Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only Do you see that?
18	A. I see that.
19	Q. Confidential: Attorney's Eyes Only
20	Confidential: Attorney's Eyes Only Do you
21	see that?
22	A. Yes, I do.
23	Q. Confidential: Attorney's Eyes Only
24	Confidential: Attorney's Eyes Only
25	Confidential: Attorney's Eyes Only

	[Page 123]
1	Confidential: Attorney's Eyes Only Correct?
2	MS. FRAZIER: Objection. Calls for
3	speculation.
4	A. Yes.
5	Q. You can answer. You can answer.
6	A. Yes, I see that.
7	Q. Confidential: Attorney's Eyes Only
8	Confidential: Attorney's Eyes Only Correct?
9	A. I see that in their document. Yes.
10	Q. Confidential: Attorney's Eyes Only
11	Confidential: Attorney's Eyes Only
12	Confidential: Attorney's Eyes Only Correct?
13	A. Yes. I understand that.
14	Q. Confidential: Attorney's Eyes Only
15	Confidential: Attorney's Eyes Only
16	Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only
18	Confide
19	A. Yes. I see it. But I don't understand
20	it.
21	Q. Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Eyes Only
23	Confidential: Attorney's
24	MS. FRAZIER: Objection.
25	Argumentative.

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- 1 A. Confidential: Attorney's Eyes Only
- 2 Confidential: Attorney's Eyes Only
- Q. You did read Mr. Fujita's deposition --
- 4 A. Yes.
- 5 O. -- correct?
- A. Yes.
- 7 Q. And you recall that he testified that
- 8 the overall cubic configuration included the
- 9 box-like configuration of the overall engine
- 10 appearance and the individual components of that
- 11 engine. Correct?
- 12 MS. FRAZIER: Objection. Misstates
- 13 testimony.
- 14 Q. You recall that, don't you?
- 15 A. Yes. I read his deposition.
- 16 Q. And you recall that. Correct?
- 17 A. And I recall that. But on this
- document Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only
- Q. But Mr. Fujita was involved in the
- 22 development of the GX engine. Correct?
- 23 A. Yes, he was.
- Q. And if you had any questions as to what
- 25 Confidential: Attorney's Eyes Only meant on

	[Page 125]
1	Page 0057929, you could have asked him. Right?
2	A. I could have, but I didn't know how to
3	get in touch with him. I never talked to him.
4	Q. Okay. Mr. Mieritz, please look at
5	Page 0057933 of Exhibit 191-A.
6	(Witness complies.)
7	A. Okay.
8	Q. And do you see that page is entitled
9	Confidential: Attorney's Eyes Only C
10	A. Yes, I do.
11	Q. Confidential: Attorney's Eyes Only
12	Confidential: Attorney's Eyes
13	A. Yes. Confidential: Attorney's Eyes Only
14	Q. And in number 3 on Page 0057933,
15	Confidential: Attorney's Eyes Only
16	Confidential: Attorney's Eyes Only Do you see that?
17	A. Confidential: Attorney's Eyes Only
18	Confidential: Attorney's Eyes Only
19	Confidential: Attorney's
20	Q. You're absolutely right. Confidential:
21	Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Eyes Only
23	A. Okay.
24	Q. Confidential: Attorney's Eyes Only
25	Confidential: Attorney's Do you see that?

	[Page 126]
1	A. I see that.
2	Q. Do you see Confidential: Attorney's Eyes Only
3	Confidential: Attorney's Eyes Only
4	Confidential: Attorney's Eyes Only Correct?
5	A. Yes.
6	Q. Confidential: Attorney's Eyes Only
7	Confidential: Attorney's Eyes Only
8	Confidential: Attorney's Eyes Only
9	Confidential: Attorney's Eyes Only Do you
10	see that?
11	A. Confidential: Attorney's Eyes Only
12	Confidential: Attorney's Yes, I do.
13	Q. So do you understand this to mean that
14	Confidential: Attorney's Eyes Only
15	Confidential: Attorney's Eyes Only
16	MS. FRAZIER: Objection. Calls for
17	speculation.
18	A. I understand this to be Confident
19	Confidential: Attorney's Eyes Only
20	Confidential:
21	Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Eyes Only
23	Q. All right.
24	A. Whatever that means.
25	Q. So your understanding is that Confidential:

	[Page 127]
1	Confidential: Attorney's Eyes Only
2	Right?
3	A. Yes.
4	Q. And that with respect to that, they
5	determined Confidential: Attorney's Eyes Only
6	Confidential: Attorney's Eyes Only
7	Confidential: Attorney's Eyes Only
8	A. That's what it says. Yes.
9	Q. I'd ask you now to take a look at
10	Page 0057950 of Exhibit 191-A.
11	(Witness complies.)
12	A. Almost the last page. Okay.
13	Q. Confidential: Attorney's Confidential: Attorney's Eyes Only
14	Confidential: Attorney's Eyes Only Right?
15	A. Yes, it is.
16	Q. Confidential: Attorney's Eyes Only
17	Confidential: Attorney's Eyes Only
18	Confidential: Attorney's Eyes Only
19	Correct?
20	A. Yes, I do.
21	Q. Confidential: Attorney's Eyes Only
22	Confidential: Attorney's Eyes Only
23	Confidential: Attorney's Eyes Only
24	Confidential: Attorney's Eyes Only Do you see
25	that?

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- 1 A. Yes.
- Q. Presumably, that's what Honda was
- 3 looking to achieve in its new GX engine?
- 4 MS. FRAZIER: Objection. Calls for
- 5 speculation.
- 6 A. This is telling me that Confidential: Attorney's
- 7 Confidential: Attorney's Eyes Only
- 8 Confidential: Attorney's Eyes Only
- 9 Q. And then you take a look at the
- supplementary explanation, and isn't it true that
- Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only Correct?
- 14 A. To me, performance has nothing to do
- 15 with mounting capacity.
- Q. Mounting capability?
- 17 A. Capability. Excuse me.
- 18 Q. Isn't it true that a manufacturer of a
- 19 general-purpose engine needs to provide an engine
- 20 to the OEM that can be appropriately mounted in
- 21 its products?
- 22 A. Yes, it is.
- Q. And isn't it true that if a company
- 24 does not provide an engine that is mountable into
- those products, then it won't be able to compete

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- effectively in the market. Right?
- 2 A. Typically, OEMs and alike mount the
- 3 engine. And if there's interference with some
- 4 parts, they can design around that, if that's the
- 5 engine that they choose.
- Q. Well, certainly, in your experience of
- 7 40 years as a design engineer, excellent mounting
- 8 capability is indicative of the quality of an
- 9 engine. Isn't that true?
- 10 A. No. You don't equate quality and
- 11 mounting capability at all.
- 12 Q. You don't. Why not?
- 13 A. Quality is perceived manufacturing,
- 14 whether the part component meets its dimensional
- specifications, whether out of a lot of 100
- pieces, X number of pieces are thrown out.
- 17 That's quality.
- 18 Q. Why do you suppose Honda was trying to
- improve the mounting capability of its engine?
- MS. FRAZIER: Objection.
- A. I was not there at the time, Ken. So I
- don't know why they looked into that.
- Q. Well, they certainly felt that this was
- 24 an important aspect of improving the GX engine.
- 25 Right?

[Page 130]

- 1 MS. FRAZIER: Objection.
- A. Possibly. Possibly they had failures
- on their ME engine, and that was one of the goals
- 4 here, was to be better than the ME engine.
- Q. And if they had failures on the ME
- 6 engine with regard to mounting capability, that
- 7 might handicap them in the market. Right?
- 8 A. It may not handicap them, but if you
- 9 were -- if you had failures on the ME engine,
- 10 you'd have to correct the failures. I would
- 11 think their goal on new engine design, one of
- 12 their goals was to improve what they had on the
- 13 ME engine.
- Q. Okay. As far as you're concerned,
- 15 based on your experience with the GX engine and
- 16 40 years of design, is the GX engine an
- 17 improvement over the ME engine that previously
- 18 existed in the market for Honda?
- 19 A. I have no experience, Ken, on the older
- engines, so I couldn't answer that question.
- Q. Were you in the -- were you working for
- 22 Briggs & Stratton in the '80s?
- 23 A. Yes.
- 24 Q. In the '70s?
- 25 A. Yes.

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- 1 Q. But you didn't have any experience in
- 2 the marketplace with engines in the '70s?
- 3 A. I had experience, but the Honda engine
- 4 at that time was not perceived within the U.S.
- 5 market that Briggs competed with as being a
- 6 competitor.
- 7 Q. So any opinions that you've rendered
- 8 today are not based on any experience you've had
- 9 with the Honda engine prior to -- any personal
- 10 experience with the Honda engine prior to the
- development of the GX engine, is that true?
- MS. FRAZIER: Objection.
- 13 A. If you're referring to the ME engine?
- 0. Yeah.
- 15 A. I have not had any experience with the
- 16 ME engine.
- 17 Q. The only experience that you had with
- 18 regard to the ME engine as part of this case is
- 19 based on materials that were provided to you
- 20 during the course of rendering your opinions.
- 21 Correct?
- 22 A. The only information that I received
- was what was in front of me, Exhibit 198-A.
- 24 Q. 191-A?
- A. Excuse me. 191-A, and I may have

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- 1 looked on the internet at the time just to see
- what the ME engine was, what type of engine.
- Q. Okay. So you've testified and it's
- 4 your opinion that the Honda GX engine, in the
- 5 trademark application, has an overall cubic
- 6 design. Correct?
- 7 A. Has an overall cubic appearance. Yes.
- 8 Q. Well, you used the word in your
- 9 opinions that you provided to counsel in this
- 10 case, the words "overall cubic design." Correct?
- A. Okay. If that's what I said, we can
- 12 use that.
- 13 Q. Okay. So it's your opinion that the
- 14 Honda GX engine in the trademark application has
- 15 an overall cubic design. Correct?
- 16 A. Yes, it does.
- 17 Q. And, again, I apologize for the
- 18 repetition, but that overall cubic design refers,
- in part, to the approximately equal width and
- 20 height of the GX engine when viewed from the
- 21 perspective of the drawing in the trademark
- 22 application. Correct?
- 23 A. When you equate cubic to length and
- 24 height, you're again equating it to a geometric
- shape. When we're looking at the Honda engine in

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- the mark, they're looking at it as a cubic
- 2 appearance.
- Q. So I'm going to show you your -- a copy
- 4 of your deposition so that you have that in front
- of you. And I'd like you to go to Page 31 in
- 6 that deposition, please.
- 7 (Witness complies.)
- 8 A. Okay.
- 9 Q. All right. And, in particular, I am
- 10 going to ask you to start at -- taking a look at
- 11 Line 21 on Page 31. And I'm going to read from
- 12 it. Fair enough?
- 13 A. Yes.
- 14 Q. This, again, is taken from your
- deposition on Friday, June 5th, here at Wilmer
- 16 Cutler's offices. Correct?
- 17 A. Yes.
- Q. And you were sworn to tell the truth
- 19 under oath. Correct?
- 20 A. Yes, I was.
- Q. And you did, correct?
- 22 A. Yes.
- Q. And isn't it true that on that day in
- that deposition, I asked you this question:
- 25 "QUESTION: So your opinion, in fact, is

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- that the overall cubic design in the trademark
- 2 shown in Exhibit 3" --
- For clarification, that's now Applicant
- 4 Exhibit 6.
- 5 -- "in Honda's view refers in part to the
- 6 overall cubic impression of the GX engine created
- 7 by the relative position, shape, size, and
- 8 orientation of the major GX engine components,
- 9 and in part to the approximate equal width and
- 10 height of the GX engine when viewed from the
- 11 perspective shown in the trademark application,
- 12 correct?"
- 13 Did I ask you that question?
- 14 A. Yes.
- Q. And your answer was:
- 16 "ANSWER: Yes."
- 17 Correct?
- 18 A. Yes.
- 19 Q. And that's still your answer today.
- 20 Correct?
- 21 A. The overall impression of the Honda GX
- 22 engine is a cubic appearance to me, and the
- 23 design elements within the engine affect the
- 24 cubic appearance of the engine.
- Q. What are the major external components

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- of the GX engine that you're referring to in your
- 2 answer to my question?
- 3 MS. FRAZIER: Objection.
- Q. That is, the answer that I read from
- 5 your deposition on June 5th.
- 6 A. Can I answer?
- 7 Q. Yes.
- 8 A. Fuel tank, the air cleaner cover, the
- 9 fan/blower housing, the carburetor cover.
- 10 Q. And it's your opinion that the cubic
- 11 design of the GX engine in the trademark
- 12 application -- it's marked as Exhibit 6 -- allows
- 13 the GX engine to be compact. Correct?
- 14 A. Cubic and compact, no, not necessarily.
- 15 Q. You issued a report in this matter
- dated September 28, 2012. Is that correct?
- 17 A. I don't have it in front of me. I
- think that's the date of my expert report.
- MS. FRAZIER: You can bring it closer
- 20 to you.
- 21 MR. NOWAKOWSKI: Yeah. You don't have
- 22 to stand up.
- 23 A. It feels good. 9/28/12.
- Q. And if you take a look at Paragraph 88
- 25 in that report --

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- 1 A. All right.
- Q. -- you say -- and this report refers to
- 3 the GX engine that's in the trademark. Right?
- 4 A. Yes, it does.
- 5 Q. And you say at Paragraph 88, "While a
- 6 cubic design allows the engine to be compact,
- other engine designs, for example, rectangular,
- 8 taller or wider or oblong, can serve this
- 9 function equally well and compete effectively
- with the Honda GX engine." Do you see that?
- 11 A. Yes, I do.
- 12 Q. So you rendered that opinion at
- 13 Paragraph 88, correct?
- 14 A. Yes, I did.
- 15 Q. That's still your opinion. Correct?
- 16 A. Yes, it is.
- 17 Q. So it is, in fact, your opinion that
- 18 this cubic design of the GX engine allows the
- 19 engine to be compact. Correct?
- 20 A. The cubic design allows it to be
- 21 compact or other engine designs allow it to be
- 22 compact.
- Q. Sure. But your opinion is that the
- 24 cubic design of the GX engine in Exhibit No. 6
- 25 allows it to be compact. Correct?

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- 1 A. Among other designs, yes.
- Q. Yeah. Your opinion is there might be
- 3 other designs that allow it to be compact.
- 4 Correct?
- 5 A. That's correct.
- 6 Q. But it's also your opinion that the
- 7 GX -- excuse me, yes, that the cubic design in
- 8 the trademark marked Exhibit No. 6 allows the GX
- 9 engine to be compact. Correct?
- 10 A. Yes. That's what I'm stating in
- 11 Paragraph 88.
- 12 Q. By the way, as long as we've got your
- report opened up, at Paragraph 86 of your report,
- in the first sentence you opined that "the
- 15 relative position, shape, size, and orientation
- of each of the major Honda GX engine components
- 17 is consistent with and creates the distinctive
- overall cubic design of the engine." Do you see
- 19 that?
- 20 A. Yes, I do.
- Q. And that's still your opinion.
- 22 Correct?
- 23 A. Yes, it is.
- MR. NOWAKOWSKI: I can take that back
- 25 from you.

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- Q. So the particular shape, size, relative
- position, and orientation of the major external
- 3 components of the GX engine that were chosen by
- 4 the designers of that engine function to create a
- 5 compact engine. Right?
- A. When packaged together, as Honda has
- 7 done, yes, the particular shape and size of the
- 8 four components render it compact.
- 9 Q. And this overall cubic design of the GX
- 10 engine, in your opinion, is one of the
- 11 distinctive characteristics of the Honda
- 12 trademark application. Right?
- 13 A. Yes.
- 14 Q. It's true that most general-purpose
- 15 engines in the general-purpose engine market are
- 16 now overhead valve inclined cylinder internal
- 17 combustion engines. Correct?
- 18 A. Yes. I think the majority are. There
- may still be some L-head engines.
- Q. By the way, as an aside, how long have
- 21 you been retired from Briggs & Stratton?
- 22 A. 2006.
- Q. Okay. So roughly the last -- for nine
- 24 years?
- 25 A. Yes.

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- 1 Q. Okay.
- 2 A. Why?
- 3 Q. Now, an overhead valve internal
- 4 combustion inclined cylinder general-purpose
- 5 engine is made up of what you refer to as the
- 6 basic engine power plant, I think in your
- 7 testimony you called it the short block, plus the
- 8 outside or external engine components. Correct?
- 9 A. Yes. You have a short block, which is
- the power plant, and then you add on the external
- 11 components, which fuel tank, air cleaner, fan,
- 12 housing, fan, carburetor, muffler, etc.
- 13 Q. So this basic engine power plant or
- 14 short block includes the cylinder head, the
- piston, connecting rod and the cap, crankshaft,
- 16 cam gear, valve train, and various miscellaneous
- 17 gearing. Correct?
- 18 A. Crank case cover, lubrication system,
- 19 governor within the engine. Yes.
- Q. And this basic engine power plant or
- 21 short block is an enclosed package with the cover
- 22 mounting to the cylinder, and the cylinder head
- 23 attached to the cylinder. Correct?
- 24 A. Yes, it is.
- Q. And it's your opinion that the basic

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- 1 engine power plant or short block of all of the
- overhead valve inclined cylinder general-purpose
- 3 engines of a given horsepower in the market are
- 4 approximately the same size?
- 5 A. To the best of my opinion, they're
- 6 approximately the same size. I know within the
- 7 industry, the slant of the cylinder is different
- 8 from some competitors. But basically they're all
- 9 the same size.
- 10 Q. So it's the shape, size, position, and
- orientation of the main external parts of the
- 12 general-purpose engine that can affect the
- physical size of the engine; that is, how big it
- 14 is. Correct?
- A. So you're saying the external parts
- 16 that are added on can affect the physical size?
- 17 O. Yeah.
- 18 A. Yes. You can change the overall
- 19 appearance of the engine by those components.
- 20 Yes.
- 21 Q. It's your view that fuel tank capacity
- 22 is an issue for general-purpose engines like the
- GX, in that OEMs in the market want engines with
- 24 as much fuel capacity as they can get. Correct?
- 25 A. Yes. Typically, when you're developing

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- 1 a new engine, customers will come back and say
- 2 they want a large fuel tank, as big as you can
- 3 make it.
- 4 Q. And it's also your opinion that the
- 5 best shape and dimensions to optimize fuel
- 6 capacity and maintain the compact GX design
- depend on the relative size, shape, position, and
- 8 orientation of the other major external engine
- 9 components on the GX. Correct?
- 10 A. Yes.
- 11 Q. Mr. Mieritz, I've placed in front of
- 12 you what has been previously marked as Applicant
- 13 Exhibit No. 33. Do you see that?
- 14 A. Yes, I do.
- Q. And is it your understanding that
- 16 Applicant Exhibit No. 33 is a picture of the line
- 17 drawing contained in the trademark application
- marked as Exhibit No. 6 with the addition of
- 19 letters A, B, C, and D?
- 20 A. Yes. I see that.
- Q. Now, generally speaking, can you
- 22 identify that the letter A is pointing to the air
- 23 cleaner cover?
- 24 A. Yes.
- Q. And the letter B is pointing to the

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- 1 fuel tank?
- 2 A. Yes.
- Q. And the letter C is pointing to the
- 4 carburetor?
- 5 A. Carburetor, carburetor cover. Yes.
- 6 Q. Carburetor cover. And D is pointing to
- 7 the fan cover?
- 8 A. Yes.
- 9 Q. And underneath the fan cover is the
- 10 fan?
- 11 A. Yes.
- 12 Q. Now, in your experience as an engineer,
- 13 after you've -- an engineer who is designing an
- 14 engine has completed the short block, they'll
- 15 begin to design and locate the major external
- 16 engine components. Correct?
- 17 A. Yes.
- 18 Q. And, in your experience, typically an
- 19 engineer designing a new engine will begin with
- the fan, flywheel, and ignition systems. Right?
- 21 A. That's where I would start. Yes. I
- think that's where most designers would start.
- Q. And the designers of the GX engine
- 24 placed the fan and the fan cover in the lower,
- 25 right side of the GX engine, as shown on

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- 1 Exhibit 33. Right?
- A. Well, the fan is a rotating member, and
- 3 it has to be mounted to the crankshaft. So the
- 4 crankshaft is -- center line is located, I
- 5 wouldn't say on the right side. I would call
- 6 that the center of the engine.
- 7 Q. Okay. And the fan cover is located, at
- 8 least on this depiction, in the center, to the
- 9 right of the Exhibit 33. Correct?
- 10 A. The fan cover on the right-hand side
- 11 has a radial shape to it.
- 12 Q. And it's true that the diameter of the
- fan on these general-purpose engines is usually
- 14 the same among engines in the market. Right?
- 15 A. I really couldn't comment on whether
- 16 the outside diameters are exactly the same.
- You'll tend to try to get as large a fan as you
- 18 can to produce as much air as you can. But you
- 19 also have to be -- think about noise.
- Q. Applicant's counsel marked this morning
- 21 Applicant No. 42, which is your declaration
- 22 before the United States Patent and Trademark
- 23 Office. Right?
- 24 A. Yes.
- Q. And in Paragraph 30 of that

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- declaration, you state, "Fan size ultimately
- 2 determines cooling rate of the engine. The
- 3 larger the fan, the better. But noise must be --
- 4 must also be considered. Maximum fan diameter is
- 5 established by the center line of the crankshaft
- 6 to the mounting legs of the cylinder. This
- 7 dimension is usually equal among competitors."
- 8 Do you see that?
- 9 A. Yes, it is.
- 10 Q. And that's still your opinion?
- 11 A. Yes, it is.
- 12 Q. Now, in Exhibit No. 33 --
- 13 A. Excuse me. When we're talking about
- 14 that dimension, that dimension is the center line
- of the crankshaft with respect to the mounting
- 16 surface on the legs of the engine. That's an SAE
- 17 standard that the industry uses. So that's
- universally accepted throughout the industry.
- 19 Q. Probably explains why the dimension is
- 20 usually equal among competitors. Right?
- 21 A. Yes. Yes.
- Q. All right. So take -- go back to
- 23 Exhibit No. 33, if you will.
- 24 (Witness complies.)
- 25 A. Okay.

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- 1 Q. Now, you can't see the inclined
- 2 cylinder or the cylinder head on that exhibit,
- 3 can you?
- 4 A. No, you can't.
- 5 Q. But it obviously exists on the GX
- 6 engine. Right?
- 7 A. Yes. I know from experience the
- 8 cylinder is inclined.
- 9 Q. Okay. And where, relative to the
- 10 picture on Exhibit -- Applicant Exhibit No. 33 is
- 11 the inclined cylinder and cylinder head on a GX
- 12 engine?
- 13 A. I'm pretty sure the incline is at a
- 14 25-degree angle. So if you take the center line
- of the engine, which is basically inside the
- dotted circle you see, that would be the center
- 17 line of the crank. A 25-degree angle from
- horizontal is where the cylinder bore extends
- 19 outward to the left, and I don't know the length
- of the bore and, but attached to the cylinder is
- 21 a cylinder head.
- Q. And when you say "outward," so it's
- 23 effectively behind what we see here --
- 24 A. Yes, it is.
- 25 Q. -- on Exhibit 33. Correct?

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- 1 A. Yes, it is.
- Q. And the cylinder extends at an
- 3 approximately 25-degree angle up toward the
- 4 carburetor. Correct?
- 5 A. Yes, it does.
- Q. And the cylinder head, on top of the
- 7 cylinder, is proximate to the carburetor.
- 8 Correct?
- 9 A. The cylinder head would be
- 10 approximately behind the carburetor, as you see
- 11 here. Maybe upwards on a 25-degree angle,
- 12 slightly.
- 13 O. But close to the carburetor. Right?
- 14 A. Yes.
- 15 Q. Now, one of the functions of the
- 16 carburetor in these kinds of general-purpose
- 17 engines is to take air that comes from the --
- 18 through the air cleaner and fuel that comes from
- 19 the fuel tank, and combine them to create a
- 20 combustible mixture. Correct?
- 21 A. Yes. The air and fuel are mixed
- 22 together and metered in the carburetor, depending
- on the engine requirements at that particular
- 24 time, and then with a spark and a compression,
- there's an explosion that produces your engine

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- 1 power.
- Q. All right. So the combined air-fuel
- 3 mixture that's in the carburetor moves through
- 4 the intake valve into the cylinder. Right?
- 5 A. It moves into the cylinder head.
- 6 Q. To the cylinder head through the intake
- 7 valve on the cylinder head. Correct?
- 8 A. Yes.
- 9 Q. And then the spark plug causes that
- 10 combustible mixture to explode. Correct?
- 11 A. The spark plug ignites the mixture.
- 12 Yes.
- Q. And that causes the piston, which is
- 14 inside of the cylinder, to move down. Right?
- 15 A. Yes. The explosion forces the piston
- down, produces a revolution.
- 17 Q. All right. And all of this, all of
- 18 this that we just talked about, is kind of
- 19 fundamental to the purpose of the GX engine,
- which is to essentially convert this combustible
- 21 mixture of air and fuel into mechanical energy,
- 22 which then runs a piece of equipment in the
- 23 marketplace. Right?
- 24 A. It's a practice on all internal
- 25 combustion engines. Yes. Not only the GX.

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- 1 Q. Right. But it is certainly that on the
- 2 GX. Correct?
- 3 MS. FRAZIER: Objection. Vague.
- 4 A. It's a requirement to run the engine.
- 5 Yes.
- Q. And you would agree that engineers
- 7 designing a general-purpose engine ideally locate
- 8 the carburetor near the intake valve of the
- 9 cylinder head. Right?
- 10 A. In my experience, the carburetor has
- 11 been located away from the cylinder head. You
- 12 don't necessarily have to mount the carburetor
- 13 directly to the cylinder head. It can be mounted
- 14 further away.
- 15 Q. My question was: You agree that
- 16 engineers have of a general-purpose engine
- 17 ideally locate the carburetor near the intake
- 18 valve. Correct?
- 19 A. That would be my first choice.
- Q. And the reason designers of
- 21 general-purpose utility engines, like you, want
- 22 to keep the carburetor near the intake valve is
- 23 because it keeps a consistent fuel supply
- 24 entering the engine, which in turn provides
- 25 better combustion characteristics. Correct?

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- 1 A. No. Even if the carburetor is mounted
- away, whether it's on a manifold, a distance, the
- 3 carburetor has to be calibrated for that
- 4 distance. And it's metered. It pulls in the
- 5 required amount of fuel that the engine is asking
- 6 for. So whether it's mounted close or whether
- 7 it's mounted further away with a manifold, you're
- 8 still asking for a fuel mixture, and that mixture
- 9 is determined by the carburetor venturi and jets
- 10 within the carburetor.
- 11 Q. So, first of all, if it's mounted
- 12 further away with a manifold, is that an
- 13 additional expense for the engine?
- 14 A. It could be.
- 15 Q. All right. I'd ask you to grab your
- deposition again that was taken on June the 5th.
- 17 Do you have that there?
- 18 A. Yeah.
- 19 Q. I ask you to take a look at Page 114.
- 20 (Witness complies.)
- 21 A. 114. Yes.
- Q. And did I ask you these questions, and
- 23 did you give these answers?
- 24 A. Where are you?
- 25 Q. I'm sorry. At Page 114, No. 5.

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- 1 Starting at Line 5.
- 2 A. Okay.
- 3 Q. "QUESTION: Is it important for the
- 4 carburetor to be located near the intake valve,
- 5 as it is in the GX engine?
- 6 "MS. FRAZIER: Objection.
- 7 "ANSWER: You try to keep the carburetor
- 8 near the intake valve on the cylinder head, if at
- 9 all possible, on range and design.
- 10 "QUESTION: And why is that?
- 11 "ANSWER: It's just a better design, better
- 12 flow characteristics that you get. Although
- 13 automotive mounts, there are old carburetors on
- 14 the older engines, quite a far distance from the
- 15 cylinder head.
- 16 "QUESTION: But in the general-purpose
- 17 engines --
- 18 "ANSWER: We try to keep it close within
- 19 reason.
- 20 "QUESTION: Okay. And that's to keep
- 21 consistent supply of fuel entering the engine
- 22 cylinder, correct?
- "MS. FRAZIER: Objection.
- 24 "ANSWER: The shorter it is, the better
- combustion characteristics you have, yes."

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- 1 Did I ask you those questions, and did you
- 2 give me those answers?
- A. Yes, you did; and, yes, I did.
- Q. And, in fact, the designers of the GX
- 5 engine that is shown in Applicant's
- 6 Exhibit No. 33 located the carburetor near the
- 7 cylinder head on -- near the intake valve on the
- 8 cylinder head. Correct?
- 9 A. Yes. I'm sure it's direct mounted to
- 10 the cylinder head.
- 11 Q. Now, the purpose of the air cleaner on
- 12 the general-purpose engine is to provide clean
- 13 air to enter the intake valve and mix with the
- 14 fuel in the carburetor. Correct?
- 15 A. You said the purpose of the air
- 16 cleaner?
- 17 O. Yes.
- 18 A. Yes. Air cleaner and air cleaner
- 19 element.
- Q. And essentially it removes particulate
- 21 from the air, which could inhibit performance of
- 22 the engine. Right?
- 23 A. Yes. You want clean air.
- Q. And would you agree that the engineers
- of the GX engine placed the air cleaner directly

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- 1 above the carburetor?
- A. It's directly above the carburetor --
- 3 well, within reason. It's above the carburetor.
- 4 Yes.
- Q. As a matter of fact, you've indicated
- 6 that the air cleaner was almost seated on top of
- 7 the carburetor. Correct?
- 8 A. Well, the air cleaner does not seat on
- 9 top of the carburetor. You've got an air cleaner
- 10 base. That base is connected to an intake elbow,
- which routes the air through a 90-degree turn
- 12 into the carburetor. So the air cleaner is
- 13 situated on top of the air cleaner base.
- Q. Which, in turn, is on top of the
- 15 carburetor in Exhibit 33, the trademark GX.
- 16 Correct?
- 17 A. Which is above the carburetor. Yes.
- 18 Q. And the air cleaner must be connected
- 19 to the carburetor. Correct?
- 20 A. Yes.
- Q. And the placement of the air cleaner
- 22 above the carburetor in the trademark application
- 23 allows the air cleaner to provide clean air to
- 24 the carburetor. Correct?
- 25 A. Yes.

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- Q. And, in fact, it's your opinion that
- the further away from the carburetor you move the
- 3 air cleaner, the more material you need to
- 4 connect the air cleaner and carburetor, and the
- 5 higher the cost. Correct?
- A. If you move it away, it depends on your
- 7 design, whether the cost is going to increase.
- 8 If you have a remote-mounted air cleaner, you've
- 9 got a tube. You have extra cost of the tube. If
- you've got a front-mount air cleaner, it may even
- 11 be less cost than on the GX version.
- 12 Q. All right. I'm going to ask you to
- 13 take a look at your June 5th deposition again,
- 14 please.
- 15 A. Okay.
- 16 Q. This time I'll ask you to take a look
- 17 at Page 112.
- 18 (Witness complies.)
- 19 A. Okay.
- Q. And starting at No. 7, Line No. 7. My
- 21 question will be, did I ask you this question,
- 22 and did you give me this answer?
- 23 "QUESTION: If you move the air cleaner
- 24 further away from the carburetor, are you
- essentially adding material to the engine to

[Page 154] 1 connect the air cleaner to the carburetor? 2 "ANSWER: Yes, you are. 3 "QUESTION: Is that an added cost? "ANSWER: Usually, yes, it is." Did I ask you those questions? 5 6 Α. Yes, you did. 7 Q. Did you give me that answer? 8 Α. Yes, I did. 9 MS. FRAZIER: Ken, if you're switching 10 topics, is now a good time for a break for lunch? 11 MR. NOWAKOWSKI: Can I -- I'm actually 12 just -- I've got about three or four more 13 questions in this area, then I'm done. Then I'll 14 move to something else. 15 MS. FRAZIER: That's fine. 16 MR. NOWAKOWSKI: Is that okay? 17 THE WITNESS: Yeah. 18 MR. NOWAKOWSKI: Okay. Good. 19 BY MR. NOWAKOWSKI: 20 Mr. Mieritz, would you agree that once Ο. 21 the engineers of the GX engine placed the 22 carburetor and the air cleaner and air cleaner 23 cover in their respective positions, the logical 24 position to place the fuel tank to maintain the

25

engine's compactness is above the fan cover, as

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- shown on Applicant No. 33 and in the trademark
- 2 application?
- 3 A. If that was the sequence they used,
- 4 yes. I don't know what sequence they used.
- 5 Q. It's your opinion that convenient
- 6 engine maintenance is necessary -- is a necessary
- 7 feature for a general-purpose engine to compete
- 8 in the market. Correct?
- 9 A. Yes, it is.
- 10 Q. And it's your opinion that the GX
- 11 engine shown in the trademark application marked
- 12 as Exhibit No. 6 enables convenient maintenance.
- 13 Correct?
- 14 A. Yes, it does.
- Q. And it's -- and the way the GX
- 16 designers designed the shape, size, orientation,
- and relative positions of the major external
- 18 components of the GX engine created an engine
- 19 that allows for convenient maintenance of certain
- 20 engine components. Correct?
- 21 A. You have to provide clearance and
- 22 access points for the maintenance parts. Yes.
- Q. So, again, just to be clear, the GX
- designers designed the shape, size, orientation,
- and relative positions of the major external

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- 1 components of the GX engine in such a way as to
- 2 create an engine that allows for that convenient
- 3 maintenance. Correct?
- 4 A. I don't think the design of the major
- 5 components affect the maintenance points. You
- 6 need to provide clearance for them, once you have
- 7 them designed, and access.
- Q. Can you take a look at your deposition
- 9 again, please.
- 10 A. Sure.
- 11 Q. This time, I'll ask you to take a look
- 12 at Page 47.
- (Witness complies.)
- 14 A. Okay.
- 15 Q. And I'll specifically ask you to take a
- 16 look at Line 19. And, Mr. Mieritz, did I ask you
- 17 this question, and did you give me this answer?
- 18 "QUESTION: So the way the GX designer
- designs the shape, size, orientation, and
- 20 relative position of the external components of
- 21 the engine contributed to create an engine that
- 22 allows for convenient maintenance, right?
- "ANSWER: On some of the components, yes."
- 24 Did I ask that question, and did you give
- 25 that answer?

[Page 157] 1 Yes, I did; and, yes, you did. Α. 2 And you agree that adaptability to a Q. 3 wide variety of applications is a necessary requirement for a general-purpose utility engine. 4 Correct? 5 6 Α. Yes. 7 And, in fact, Honda advertises its 8 compact GX engine design as making its GX engine adaptable to a wide variety of applications. 10 Correct? 11 I believe they do. Yes. 12 And, in fact, you've seen that Honda 13 literature. Haven't you? 14 Α. Yes. 15 MR. NOWAKOWSKI: We can take a break. 16 (Lunch recess was taken.) 17 (Utility Model No. S63-32344 18 marked Opposer's Exhibit 26.) 19 (Utility Model No. S62-33961 20 marked Opposer's Exhibit 27.) 21 (Utility Model No. S63-35160 22 marked Opposer's Exhibit 28.) 23 BY MR. NOWAKOWSKI: 24 0. We're back on the record after lunch. 25 I'm going to ask you some more questions.

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- 1 that okay?
- 2 A. It sure is.
- Q. First question I'm going to ask is, did
- 4 you discuss any aspect of your testimony with
- 5 counsel during our lunch break?
- 6 A. I think the only thing we talked about
- 7 was when you mentioned the rotating fan diameter,
- 8 she just wanted an explanation of what that
- 9 center line dimension was.
- 10 Q. Okay. I have now shown you and put in
- 11 front of you what has been marked as Opposer
- 12 Exhibit 26. Do you see that?
- 13 A. Yes, I do.
- 14 Q. And that's a Japanese utility model,
- 15 S63-32344. Is that right?
- 16 A. I see the -- yes. Yes, it is.
- 17 Q. And it's both a Japanese version and an
- 18 English version. Correct?
- 19 A. It appears to be. Yes.
- Q. And you reviewed this -- I'm going to
- 21 refer to this as the '344 utility model.
- 22 A. Sure.
- Q. And you've reviewed this '344 utility
- 24 model in connection with your opinions in this
- 25 matter. Correct?

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- 1 A. Yes, I have.
- Q. And you understand that the '344
- 3 utility model is a Japanese-examined utility
- 4 model. Correct?
- 5 A. Yes, it is.
- Q. And the '344 utility model is a utility
- 7 model on a general-purpose internal combustion
- 8 engine as claimed and described in the utility
- 9 model. Correct?
- 10 A. Yes, it is.
- 11 Q. And the -- and Honda is the Applicant
- for the '344 utility model. Correct?
- 13 A. Yes, it is.
- Q. Do you agree that the '344 utility
- 15 model is a utility model for the Honda GX engine?
- 16 A. I agree they're claiming a
- 17 general-purpose engine, whether it's a GX or any
- 18 other similar engine.
- 19 Q. You do agree that it depicts and
- 20 describes an engine similar to the GX. Right?
- 21 A. It describes an engine that has similar
- 22 characteristics to the Honda GX engine.
- Q. I refer you to Figure 1, which is on
- 24 Bates No. 0061135. I'm sorry. I think I
- 25 misspoke. It's 0006515. Withdraw that.

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- 1 I'm sorry. I withdraw that question,
- 2 because I was looking at the wrong exhibit.
- 3 Okay. I've got it straight.
- 4 A. Okay.
- 5 Q. Take a look at Bates 0061135. Okay?
- A. Yes.
- Q. And on the top of that page is what's
- 8 shown as Figure 1. Correct?
- 9 A. Yes.
- 10 Q. And Figure 1 in this '344 utility model
- shows an engine configured similar to the GX
- 12 engine. Correct?
- 13 A. It shows a single cylinder, horizontal
- shaft, overhead valve, slant engine. Yes.
- Q. Well, my question is, it shows a
- 16 utility model -- excuse me, the utility model
- 17 shows an engine configured similar to the GX.
- 18 Correct?
- 19 MS. FRAZIER: Objection. Asked and
- 20 answered.
- Q. You can answer.
- 22 A. Yes.
- Q. And it's your opinion that the basic
- 24 configuration of the engine described and
- depicted in the '344 utility model Confidential: Attorney's

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- 1 Confidential: Attorney's Eyes Only
- 2 Confidential: Attorney's Eyes Only
- Correct?
- 4 A. I'm confused by all the numbers, but if
- 5 you're referring to the engine on the mark --
- 6 okay.
- 7 Q. Should I ask the question again?
- 8 A. In a minute. Okay.
- 9 Q. So my question is: It's your opinion
- 10 that the basic configuration of the engine
- described and depicted in the '344 utility model
- is the same as the engine shown in the Honda
- 13 development document marked as Exhibit 191-A at
- 14 Bates Page AHGX0057928. Correct?
- A. Confidential: Attorney's Eyes Only
- 16 Confidential: Attorney's
- 17 Q. And the two inventors of the engine
- described and claimed in the '344 utility model
- 19 are Mr. Yamaguchi and Mr. Ogano. Correct?
- MS. FRAZIER: Objection.
- 21 A. Yamaguchi and Ogano. Yes.
- 22 Q. And both of those individuals were
- involved in the development of the GX engine.
- 24 Correct?
- 25 A. I think I've seen their name on the

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- 1 Honda literature that I have. Yes.
- Q. So Mr. Fujita testified that they were
- 3 both involved in the development of the GX
- 4 engine. Correct?
- 5 A. Yes.
- Q. And, as a matter of fact, on some of
- 7 that literature, Mr. Yamaguchi was listed as a
- 8 project leader, correct, on the GX engine?
- 9 A. I believe so.
- 10 Q. And Mr. Fujita has testified that the
- 11 GX engine was developed between 1980 and 1983.
- 12 Correct?
- 13 A. Yes.
- 14 Q. And the '344 utility model was filed in
- 15 1982. Correct?
- 16 A. Yes.
- 17 Q. And the '344 utility model claims and
- describes a general-purpose engine with an
- 19 inclined cylinder.
- 20 A. Yes, it does.
- Q. Just like the GX engine. Correct?
- 22 A. Just like the GX or many other engines.
- 23 Yes.
- Q. And the engine claimed and described in
- 25 the '344 utility model has an overhead valve

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- 1 system. Correct?
- 2 A. Yes.
- 3 Q. Just like the GX engine. Correct?
- 4 A. Yes.
- 5 Q. And the engine claimed and described in
- 6 the '344 utility model has a slanted fan cover.
- 7 Correct?
- 8 A. It includes the outer surface of a fan
- 9 cover located on the opposite side. So what I
- 10 see, it just talks about fan cover located on the
- 11 opposite side.
- 12 Q. Do you have your deposition in front of
- you, please?
- 14 A. Yes.
- 15 Q. Take a look at Page 56, please.
- 16 (Witness complies.)
- 17 A. Okay.
- Q. Did I ask you this question, and did
- 19 you give this answer?
- 20 "QUESTION: And the utility model '344 has a
- 21 fan housing with a slant, correct?
- 22 "ANSWER: Pictorially, it shows that. I'm
- trying to read in the verbiage if it says that.
- 24 He calls it a 'fan cover' located the opposite
- 25 side."

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- 1 Did I ask that question, and did you give
- 2 that answer?
- 3 A. It's the same answer I gave right now,
- 4 yes.
- 5 Q. So, pictorially, it shows a fan cover
- 6 with slants. Correct?
- 7 A. Yes, it does, pictorially. So it's the
- 8 back side of a fan cover.
- 9 Q. And that same Figure 1 that you were
- 10 looking at on the '344 utility model shows a fan
- 11 cover that is slanted in the same direction as
- 12 the slant on the GX fan cover. Correct?
- 13 A. It's slanted upward. Yes.
- 14 Q. And Figure 1 of the '344 utility model
- 15 shows an engine whose height and width from the
- 16 front view are about the same. Correct?
- 17 A. Correct.
- Q. And that's the same as the GX engine.
- 19 Correct?
- 20 A. That's correct.
- Q. And the overall appearance of the
- 22 engine claimed and described in the '344 utility
- 23 model is squarish from the front, in your
- 24 opinion. Right?
- MS. FRAZIER: Objection. Calls for

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- 1 speculation.
- A. It doesn't show the front side. I
- 3 would have to assume it looks square from the
- 4 front side.
- 5 Q. You would -- would you presume that,
- 6 based on your experience and what you see from
- 7 the -- from Figure 1?
- 8 A. From looking at the back side, yes.
- 9 Q. And that's the same as the GX engine;
- 10 that is to say, the overall appearance of the GX
- engine is also squared from the front. Correct?
- 12 A. Yes.
- 13 Q. And the overall squarish appearance of
- 14 the GX from the front view is one of the
- 15 distinctive features of the overall cubic design
- of the engine in the Honda trademark, in your
- 17 opinion. Correct?
- 18 A. The overall shape of the Honda, when
- 19 viewed from the 2D, yes, gives it a cubic
- 20 appearance.
- Q. Well, it gives it a squarish appearance
- from the front; that is to say, approximate equal
- 23 height and width. Correct?
- 24 A. Yes.
- Q. And Figure 1 of the '344 utility model

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- shows the fuel tank of the engine in the same
- 2 location as the fuel tank on the engine described
- 3 in the GX engine on the trademark. Correct?
- A. Viewed from the front, it's on the
- 5 upper right-hand side. Yes.
- Q. And Figure 1 of the '344 utility model
- 7 shows an engine with an air cleaner and cover in
- 8 the same place as the air cleaner and cover in
- 9 the Honda trademark application, GX engine,
- 10 right?
- 11 A. It shows it, yes, to be in the
- 12 approximate same location.
- 13 O. And both the fuel tank in the location
- 14 shown in Figure 1 of the '344 utility model and
- 15 the air cleaner in the location shown in Figure 1
- of the '344 utility model are claimed in the
- 17 Claims section of the '344 utility model.
- 18 Correct?
- 19 A. The fuel tank is claimed that it is
- 20 located above the crank case and air cleaner
- 21 located above said cylinder head. Yes.
- 22 Q. And the fuel tank and air cleaner cover
- shown in Figure 1 of the '344 utility model and
- 24 described and claimed in that utility model are
- in the same position relative to each other as

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- 1 shown in the Honda trademark application,
- 2 Exhibit No. 6. Right?
- 3 A. Yes, they are.
- Q. And the fuel tank shown in Figure 1 of
- 5 the '344 utility model is approximately
- 6 rectangular in shape. Correct?
- 7 A. Yes, it is.
- 8 Q. And the fuel tank shown in the Honda
- 9 trademark is roughly rectangular. Correct?
- 10 A. Yes, it is.
- 11 Q. And, in your opinion, the rectangular
- 12 shape of the fuel tank on the engine in the Honda
- 13 trademark is one of the features which
- 14 contributes to the distinctive design of the
- 15 Honda trademark engine. Correct?
- 16 A. It's one of the many features. Yes.
- 17 Q. And, in your view, a rectangle is a
- 18 boxy shape. Right?
- 19 A. It's relative. I wouldn't consider
- 20 it -- the Honda GX fuel tank to be boxy.
- 21 Q. Can you take a look at your deposition,
- 22 please.
- 23 A. Sure.
- Q. This time at Page 59.
- 25 (Witness complies.)

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- 1 A. Okay.
- Q. And, in particular, I'll refer you to
- 3 Lines 2 -- line 21.
- 4 A. Okay.
- 5 Q. "QUESTION: Do you consider a rectangle
- 6 to have a boxy shape?
- 7 "ANSWER: It's a relative term. I mean,
- 8 boxy could be more squarish to some people. I
- 9 suppose you could consider rectangle to be
- 10 somewhat of a box."
- 11 Did I ask you that question, and did you
- 12 give me that answer?
- 13 A. Yes, you did; and, yes, I did.
- 14 Q. Is the outside shape of the air cleaner
- 15 cover claimed and described in the '344 utility
- 16 model essentially square?
- 17 A. I would say it's essentially square
- with a domed top.
- 19 Q. And is -- and that is the same as the
- outside shape of the air cleaner cover on the
- 21 engine in the Honda trademark applications.
- 22 Correct?
- 23 A. The Honda shape is square with a
- 24 beveled edge along the top. And it's not domed.
- 25 It's flat. It's horizontal.

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- 1 Q. But the basic outside shape is
- 2 essentially square. Correct?
- 3 A. Basic outside shape is essentially the
- 4 same. Yes.
- Q. And the top of the air cleaner cover
- 6 and the top of the fuel tank on the engine
- 7 claimed and described in the '344 utility model
- 8 are at about the same height. Correct?
- 9 A. Yes. Approximately the same height.
- 10 Q. And that's the same as the GX engine in
- 11 the Honda trademark application. Right?
- 12 A. Yes, it is.
- 13 Q. Based on the relative position of the
- 14 main external parts that are visible on Figure 1
- of the '344 utility model, you would consider the
- 16 engine depicted in the '344 utility model to have
- 17 an overall cubic design. Correct?
- 18 A. Again, if you're referring to a cube,
- 19 geometric length and width, yes. If you're
- 20 referring to the cubic appearance that's depicted
- on the mark, I would say no.
- Q. Take a look at Exhibit 62, please --
- 23 I'm sorry, your deposition at Page 62, please.
- 24 (Witness complies.)
- 25 A. Okay.

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- 1 Q. And at Line 11, did I ask you this
- 2 question and did you give me this answer?
- 3 "QUESTION: Based on the position -- the
- 4 relative position of the external parts that you
- 5 see in Figure 1, can you surmise that the engine
- 6 depicted in utility model '344 has an overall
- 7 cubic appearance?"
- 8 "MS. FRAZIER: Objection.
- 9 "ANSWER: Just offhand, I would consider it
- 10 to be overall cubic."
- 11 Did I ask that question, and did you give
- 12 that answer?
- 13 A. Yes, you did; and, yes, I did.
- 14 Q. The fuel tank on the engine described
- in the '344 utility model has a seam. Correct?
- 16 A. Yes, it does.
- 17 Q. The fuel tank on the GX engine in the
- 18 Honda trademark application has a seam. Correct?
- 19 A. Yes, it does.
- 20 Q. The muffler on the engine described in
- 21 the '344 utility model is positioned above the
- 22 cylinder head and on the opposite side of the
- 23 cylinder head from the air cleaner. Correct?
- 24 A. It's positioned above the cylinder head
- and opposite the air cleaner cover. It's above

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- the cylinder head, and it's, yes, on the back
- 2 side of the air cleaner cover.
- 3 Q. So the answer is yes?
- 4 A. Yes.
- 5 Q. The upper surface of the air cleaner
- 6 cover, muffler and fuel tank on the engine
- 7 described in the '344 utility model are
- 8 substantially flush with one another. Correct?
- A. Yes.
- 10 Q. On the engine described in the '344
- 11 utility model, Honda has positioned the fuel
- 12 tank, air cleaner, and air cleaner cover and
- muffler in the space having a volume as large as
- 14 possible above the crank case, cylinder, and
- 15 cylinder head. Correct?
- 16 A. Repeat that again.
- 17 Q. Sure. On the engine described in the
- 18 '344 utility model, Honda has positioned the fuel
- 19 tank, air cleaner and air cleaner cover and
- 20 muffler in a space having a volume as large as
- 21 possible above the crank case, cylinder, and
- 22 cylinder head?
- 23 A. Yes. I would agree with that.
- Q. And would you also agree that in the
- 25 '344 utility model, Honda says that its

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- 1 configuration of the major external components of
- 2 the engine described there is a favorable design
- 3 because it allows the fuel tank, air cleaner and
- 4 muffler to be arranged compactly?
- 5 A. You're saying it states that in the
- 6 claims?
- 7 Q. I'm asking whether that Honda says that
- 8 in the '344 utility model.
- 9 A. I'd have to read through it to find
- 10 where it says that.
- 11 THE WITNESS: Could you read the
- 12 question back, please.
- MR. NOWAKOWSKI: Sure.
- Q. Would you agree that in the '344
- 15 utility model, Honda says that its configuration
- of the major external components of the engine
- 17 described there is a favorable design because it
- 18 allows the fuel tank, air cleaner and muffler to
- 19 be arranged compactly? You can take a look at
- 20 the entire document, but I would refer you to the
- 21 end of the second paragraph in -- on
- 22 Page AHGX0061139.
- 23 A. Yes. I see that.
- Q. And isn't it -- it's also true,
- Mr. Mieritz, that in the '344 utility model,

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- 1 Honda says that compactness, light weight,
- 2 adaptability to a wide variety of applications,
- 3 and ease of maintenance are all necessary
- 4 requirements for a general-purpose utility
- 5 engine?
- A. Again, I'd have to read through this to
- 7 see where they say that .
- Q. Again, you can read the entire thing.
- 9 But if you take a look at the first two
- paragraphs of AHGX0061137, it might help.
- 11 A. "Internal combustion engines of this
- 12 kind are not only compact and light weight, but
- 13 are also adaptable to a wide variety of
- 14 applications." So I see that on the first
- 15 paragraph.
- 16 Q. And does it also say, "The purpose of
- 17 this model, "meaning the utility model, "is to
- 18 provide an internal combustion engine that
- 19 fulfills those requirements necessary for
- 20 general-purpose internal combustion engines"?
- 21 A. Yes, it does. I see that.
- Q. And is it true that in the '344 utility
- 23 model, Honda says that the engine described and
- 24 claimed in the '344 utility model is compact,
- lightweight, and adaptable to a wide variety of

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- 1 applications?
- A. I don't see that in the claim. I see
- 3 that in the general description.
- Q. Isn't it true, Mr. Mieritz, that Honda
- 5 is telling us in the general description that the
- 6 utility model that's claimed here meets those
- 7 requirements of compactness, lightweight, and
- 8 adaptability to a wide variety of applications?
- 9 A. In my experience with patents -- you're
- 10 better than me in patent language -- but I've
- 11 always been taught that the claims are what is
- 12 most important. The description is talking about
- a general engine that's necessary in order to
- 14 meet the claim.
- 15 Q. On Page AHGX0061137, Honda does tell us
- that the purpose of this model, meaning the '344
- model, is to provide an internal combustion
- engine that fulfills the above requirements,
- 19 which are light weight, compact, and adaptability
- 20 to a wide variety of applications. Right?
- 21 A. Where is that?
- Q. That is that second paragraph on
- 23 AHG0061137.
- 24 A. Yes.
- Q. And Honda also says in the '344 utility

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- 1 model that the engine described and claimed there
- 2 allows for easy care and maintenance of various
- 3 engine parts. Correct?
- 4 A. Yes, it does.
- Q. And it's your opinion that the engine
- 6 claimed and described in the '344 utility model
- 7 is a lightweight and compact design. Correct?
- 8 A. Yes, it is.
- 9 Q. And it's your opinion that the engine
- 10 claimed and described in the '344 utility model
- is adaptable to a wide variety of applications.
- 12 Correct?
- 13 A. Yes, it is.
- Q. And it's your opinion that the engine
- 15 described in the '344 utility model allows for
- 16 convenient maintenance. Correct?
- 17 A. That's the whole purpose of this patent
- is for serviceability. Yes.
- 19 Q. Okay. You can put that one aside. All
- 20 right. I've shown you what has been marked as
- 21 Opposer Exhibit No. 27. Do you have that in
- 22 front of you?
- 23 A. Yes, I do.
- Q. And that is a Japanese utility model
- 25 S62-33961. Correct?

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- 1 A. Yes, it is.
- Q. And you reviewed this utility model in
- 3 connection with your opinions in this matter.
- 4 Correct?
- 5 A. Yes, I did.
- Q. And the '961 utility model is an
- 7 examined utility model filed by Honda Motor
- 8 Company on September 22, 1982. Correct?
- 9 A. Yes.
- 10 Q. And, again, this '961 utility model was
- 11 filed in the window when Honda was developing its
- 12 GX engine. Correct?
- 13 A. Yes.
- 14 Q. The inventor of the '961 utility model
- is Mr. Yamaguchi, whom you understand to have
- 16 been involved in the development of the GX
- 17 engine. Correct?
- 18 A. Yes. I see that.
- 19 Q. And the '961 utility model claims a
- 20 general-purpose engine. True?
- 21 A. Yes.
- Q. Take a look at Figure 1.
- 23 (Witness complies.)
- Q. And does Figure 1 in the '961 utility
- 25 model show an engine of the same general

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- 1 configuration as the GX engine in the trademark
- 2 application?
- A. It's a very generic drawing of the same
- 4 drawing in the GX application. Yes.
- 5 Q. And the engine described in the '961
- 6 utility model has a generally square air cleaner
- 7 cover. Correct?
- 8 A. Yes.
- 9 Q. Like the GX engine in the trademark
- 10 application? Correct?
- 11 A. Yes.
- 12 Q. The engine described in the '961
- 13 utility model has a generally rectangular fuel
- 14 tank. Correct?
- 15 A. Yes.
- 16 Q. Like the GX engine in the trademark
- 17 application?
- 18 A. Yes. There are differences, though.
- 19 Q. But it's generally rectangular in
- 20 shape. Correct?
- 21 A. Yes.
- Q. And the fuel tank on the engine
- described in the '961 utility model has a rib.
- 24 Correct?
- A. Yes, it does.

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- 1 Q. As does the GX engine in the trademark
- 2 application. Correct?
- A. Yes, it does.
- Q. And the fuel tank and air cleaner and
- 5 cover on the '961 utility model are positioned
- 6 relative to each other in the same way as on the
- 7 GX engine in the Honda trademark application.
- 8 Correct?
- 9 A. Yes.
- 10 Q. The fuel tank on the engine described
- in the '961 utility model is located essentially
- 12 in the same position as the fuel tank on the GX
- 13 engine in the trademark application. Correct?
- 14 A. Yes, it is.
- 15 Q. The air cleaner on the engine described
- in the '961 utility model is located essentially
- 17 in the same position as the air cleaner on the GX
- 18 engine in the trademark application. Correct?
- 19 A. Yes, it is.
- Q. The carburetor on the engine described
- 21 in the '961 utility model is located essentially
- in the same position as the carburetor on the GX
- engine in the trademark application. Correct?
- 24 A. Yes, it is.
- Q. The fan cover on the engine described

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- in the '961 utility model has a slant on the left
- 2 side when looking from the front. Correct?
- A. Yes, it does.
- 4 O. And the slant on the left side of the
- 5 fan cover in the engine described in the '961
- 6 utility model has the same general shape as the
- 7 slant on left side of the fan cover of the GX
- 8 engine in the Honda trademark. Correct?
- 9 A. Yes, it does.
- 10 Q. And you can draw a straight line from
- 11 the base of the slant on left side of the fan
- 12 cover of the engine in the '961 utility model to
- 13 the carburetor. Correct?
- 14 A. Draw it upward on the angle?
- Q. Yeah.
- 16 A. Yes.
- 17 Q. And that's similar to the angle of the
- 18 slant on the GX engine in the trademark.
- 19 Correct?
- A. Yes, it is.
- Q. And, in fact, the straight line from
- 22 the base of the slant on left side of the fan
- cover to the carburetor is one of the features,
- 24 in your opinion, that is a distinctive feature of
- 25 the Honda trademark. Correct?

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- 1 A. Yes, it is.
- Q. The engine described in the '961
- 3 utility model has a fan cover with a straight
- 4 line on its left side and a straight line on its
- 5 top side. Right?
- 6 A. Vertical and horizontal line, you're
- 7 referring to?
- 8 Q. Yeah.
- 9 A. Yes, it does.
- 10 Q. And this feature also appears on the GX
- engine in the trademark. Correct?
- 12 A. Yes.
- 13 Q. As a matter of fact, that's one of the
- 14 features which you identify as a distinctive
- 15 feature of the Honda trademark. Correct?
- 16 A. That's correct.
- 17 Q. It's your opinion that the engine
- described in the '961 utility model is generally
- 19 cubic. Correct?
- A. Yes, it is.
- Q. In the same way that the GX engine in
- 22 the Honda trademark is generally cubic. Correct?
- A. Yes, it is.
- Q. In your view, the engine described and
- shown in the '961 utility model has generally

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- 1 boxy external engine components, in that they are
- 2 generally cubish, rectangular shapes. Correct?
- 3 A. Again, "boxy" is a relative term.
- 4 They're generally rectangular or square,
- 5 cube-shaped components.
- Q. Mr. Fujita, in his testimony, which you
- 7 read in support of your opinions, refers to those
- 8 shapes as boxy. Right?
- 9 A. Yes.
- 10 Q. All right. You can put that one aside,
- 11 please.
- 12 Mr. Mieritz, I show you what's been marked
- as Opposer Exhibit 28. Do you have that in front
- 14 of you?
- 15 A. Yes, I do.
- 16 Q. This is a Japanese utility model
- application 63-35160. Correct?
- 18 A. Yes, it is.
- 19 Q. And you reviewed this in connection
- 20 with your opinions in this matter. Correct?
- 21 A. Yes, I did.
- Q. And the '160 utility model application
- is an application by Honda. Correct?
- 24 A. Yes.
- Q. And it was filed in October of 1982,

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- 1 the same window when the GX engine was being
- 2 developed by Honda. Correct?
- 3 A. That's correct.
- Q. And you agree that the Figure 1 in the
- 5 '160 utility model application shows a
- 6 general-purpose utility engine that is cubic in
- 7 design. Correct?
- 8 A. Yes, it is.
- 9 Q. And you agree that the air cleaner and
- fuel tank on the '160 utility model application
- are in the same relative position to each other
- 12 as they are on the GX engine in the trademark
- 13 application. Correct?
- 14 A. Yes, they are.
- 15 Q. And you agree that the fan cover on the
- 16 '160 utility model application has a slant on the
- 17 left side. Correct?
- 18 A. Yes.
- 19 Q. Just as on the GX engine in the
- 20 trademark application? Correct?
- 21 A. Yes.
- Q. And you agree that the slant on the
- left side of the fan cover in the '160 utility
- 24 model goes up to the carburetor at about the same
- 25 angle as on the GX engine. Right?

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- 1 A. Yes.
- Q. And, again, this is one of the features
- you identified as a distinctive feature of the GX
- 4 engine in the trademark application. Correct?
- 5 A. Yes.
- Q. And the engine shown in the '160
- 7 utility model application has a fan cover with a
- 8 straight left side and a straight top side, just
- 9 as on the GX engine in the trademark application.
- 10 Correct?
- 11 A. Yes, it does.
- 12 Q. And this also is a feature you
- 13 identified as a distinctive feature of the GX
- 14 engine in the trademark application. Correct?
- 15 A. That's correct.
- 16 Q. The fuel tank in the engine shown in
- 17 the '160 utility model application has a rib.
- 18 Correct?
- 19 A. Yes, it does.
- Q. Just as the GX engine has a rib.
- 21 Correct?
- 22 A. Yes.
- Q. And you agree that the engine shown in
- 24 the '160 utility model application is a compact,
- 25 general-purpose engine. Correct?

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- 1 A. Yes.
- Q. In fact, to you, the engine shown in
- 3 the '160 utility model looks like the GX engine.
- 4 Correct?
- 5 A. In general terms, yes.
- Q. The air cleaner is square and the fuel
- 7 tank is rectangular on the '160 utility model.
- 8 Correct?
- 9 A. Yes, it is.
- 10 Q. And you agree that the engine shown in
- the '160 utility model application is generally
- 12 cubic in that its height and width from the front
- 13 are generally the same. Correct?
- 14 A. That's correct.
- 15 Q. And that's the same as the GX engine on
- 16 the trademark application. Correct?
- 17 A. That's correct.
- 18 Q. Okay. You can put that aside.
- 19 Mr. Mieritz, during the course of your direct
- examination, you were asked by counsel to compare
- 21 the features of the fan cover, carburetor cover,
- 22 air cleaner cover, and fuel tank on the GX
- 23 trademark application to pictures of other
- engines that you recognize in the marketplace.
- 25 Correct?

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- 1 A. That's correct.
- Q. And during the course of that
- 3 testimony, you identified differences in features
- 4 on those various external components on the
- 5 engines in the marketplace from the features of
- 6 those components in the GX trademark application.
- 7 Correct?
- 8 A. That's correct.
- 9 Q. And, in fact, you testified that, as a
- 10 result of those differences, the engines on -- in
- 11 the marketplace had a different appearance than
- 12 the trademark engine on the Honda trademark
- 13 application. Correct?
- 14 A. That's correct.
- 15 Q. Now, if I were to show you a picture
- of -- I'll withdraw that question.
- 17 You're aware of the fact that the engine --
- 18 the GX engine that Honda now sells has features
- 19 that are different from features that are shown
- on the Honda trademark application. Correct?
- 21 A. Yes.
- Q. And those differences include the
- 23 elimination of ribs on the carburetor. Correct?
- 24 A. Yes. That's correct. On the
- 25 carburetor cover.

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- 1 O. On the carburetor cover. The addition
- of a skirt to the air cleaner on the GX engine.
- 3 Correct?
- A. To the air cleaner cover on the lower, left-hand
- 5 right-hand side. Yes.
- 6 Q. A change in the beveling on both the
- 7 fuel tank and the air cleaner cover. Correct?
- 8 A. Yes.
- 9 Q. And the fuel tank on the GX engine
- 10 that's being sold is slightly taller than the
- 11 engine shown on the trademark application. Is
- 12 that right?
- 13 A. That's correct.
- 14 MS. FRAZIER: Objection.
- MR. NOWAKOWSKI: You may answer.
- 16 A. That's correct.
- 17 Q. And, by the way, the picture of the
- 18 trademark application on Exhibit No. 6 shows a
- 19 flat bottom on the fan cover. Correct?
- 20 A. A flattened portion on the very bottom?
- Q. Yeah.
- 22 A. Yes, it does.
- Q. When you look at -- does -- isn't it
- 24 true that the GX engine that is sold by Honda has
- 25 the rounded fan cover?

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- 1 A. I couldn't say, without looking at the
- engine, but from all of the literature that I've
- 3 seen, it's flattened.
- Q. Well, I'll show you what's been marked
- 5 previously as Opposer's No. 1, which has been
- 6 identified as an older version of the Honda GX
- 7 engine. It was identified in Mr. Witmore's
- 8 deposition.
- 9 Taking a look at Opposer Exhibit No. 1, does
- 10 that Honda GX engine have a rounded fan cover or
- a flattened fan cover on the bottom?
- 12 A. This particular one looks rounded to
- 13 me.
- Q. Thank you. Thank you. So if I were to
- show you a picture of, on one side, the Honda GX
- 16 engine that's being sold now and set it next to a
- 17 picture of the trademark application drawing --
- 18 A. Yes.
- 19 Q. -- that's part of Applicant's
- 20 Exhibit No. 6, and asked you to compare the
- 21 carburetor cover on each, your testimony would be
- 22 that the carburetor cover on the GX engine that's
- 23 being sold looks different than the carburetor
- 24 cover on the trademark application. Correct?
- 25 MS. FRAZIER: Objection.

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- 1 A. If I'm viewing it with my engineering
- 2 eye and my experience with Honda engines, yes, I
- 3 could pick out the differences.
- Q. Sure. It doesn't have four ribs.
- 5 Correct?
- A. Right.
- Q. By the way, when you were looking at
- 8 these other examples of the -- of the engines and
- 9 comparing them to the Honda trademark exhibit --
- 10 trademark application, were you also using your
- 11 experience and knowledge of the Honda GX engine
- and those other engines, that specialized
- 13 knowledge that you have?
- 14 A. I don't really understand the question,
- when you mean using that specialized knowledge.
- 16 The only knowledge I have with the 40 years'
- 17 experience is an eye, a trained eye. And I can
- pick out a Honda engine versus other engines from
- 19 a distance.
- Q. Based on your 40 years of experience?
- 21 A. Based on my familiarity with the Honda
- 22 engine and other engines. Yes.
- Q. Okay. And if I were to, again, put
- 24 that Honda GX engine -- a picture of the
- 25 trademark Honda GX engine next to a picture of

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- the GX engine that's being sold and ask you
- whether the beveling on the fuel tank and the
- 3 beveling on the air cleaner cover were the same
- 4 beveling as were on the trademark application,
- 5 you would say no. Correct?
- 6 MS. FRAZIER: Objection.
- 7 A. I, myself, could probably pick out the
- 8 difference, yes. Where the normal, average
- 9 person probably might not see that.
- 10 Q. Could that be true of your testimony
- 11 regarding the other engines, that the normal,
- 12 average person wouldn't be able to pick out all
- 13 the details that you picked out, showing the
- 14 differences between the Honda trademark and those
- other engines that were shown to you by counsel?
- 16 A. No. I think that's not true. I think
- 17 the average person would be able to pick out, for
- instance, on the Intek 9-horsepower, that the
- 19 fuel tank is much taller. The fuel tank has got
- 20 more of a square look to it than the Honda, plus
- 21 some the other engines I explained.
- Q. But in the case of the beveling, you're
- 23 saying that was -- that would take specialized
- 24 knowledge, based on years of experience with the
- 25 GX engine?

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- 1 A. No. I'm not saying that. I'm saying
- 2 there are people that have an eye for details.
- 3 There are people that have an eye for mechanics.
- 4 My neighbor next to me does not even know how to
- 5 use a hammer, so he probably wouldn't know the
- 6 difference between a chamfer, big or small. So
- 7 he wouldn't pick that out. There are people that
- 8 can't pick it out.
- 9 Q. If I were to show you the picture --
- show you the picture of the GX engine in the
- 11 trademark application and next to it the GX
- 12 engine, itself, and asked you whether the --
- 13 there was a skirt on the current GX engine and
- 14 there wasn't one on the GX trademark, your answer
- would be yes. Correct?
- MS. FRAZIER: Objection.
- 17 A. Yes. I could pick that out.
- 18 Q. Yeah. And so your answer -- I'll
- 19 withdraw that.
- So you would say that, in that respect, the
- 21 current GX engine is different in appearance than
- 22 the -- than the trademark application. Correct?
- MS. FRAZIER: Objection.
- A. To me, it has a difference, because I
- 25 know what I'm looking for. To the average

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- person, it wouldn't have that effect.
- Q. Are you -- would you expect that the
- 3 consuming public for these engines, like OEMs and
- 4 dealers, would have the same kind of trained eye
- 5 as you, and they would be able to pick up those
- 6 differences, such as the elimination of the ribs
- 7 or the change of the beveling on the fuel tank
- 8 and air cleaner cover or the addition of the
- 9 skirt?
- 10 A. I would think people within the
- industry, OEMs, that use the engine, that
- 12 purchase the engine, some of them could pick out
- 13 these differences. I think the ribs are
- 14 something that you could pick out easily. The
- beveling and the height of the fuel tank.
- 16 The skirt on the air cleaner cover might not
- 17 be easily picked out, but I would think if you're
- 18 purchasing engines from Honda and there's a
- 19 change made, the average OEM or consumer could
- 20 pick those out.
- Q. Now, you opined that the four ribs on
- 22 the carburetor in the trademark application,
- 23 Applicant Exhibit No. 6, were distinctive
- 24 stylistic features of the GX engine in the
- 25 application. Correct?

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- 1 A. The four ribs on the carburetor
- 2 cover --
- Q. Yes.
- 4 A. -- are distinctive.
- 5 Q. That was your opinion?
- 6 A. Yes, it is -- was.
- 7 Q. But it's also your opinion that the
- 8 removal of those ribs would not change the
- 9 overall appearance of the engine. Right?
- 10 A. It's my opinion that the engine still
- 11 has the overall cubic appearance without the four
- 12 ribs on the carburetor cover.
- 13 O. And the reason it has the overall cubic
- 14 appearance, in your opinion, is that it has about
- 15 the same width and height from the front view,
- 16 and the major external components are squarish
- 17 and rectangular. Correct?
- 18 A. My reasoning with respect to the four
- 19 ribs or with the ribs removed comes with respect
- to the components we've been talking about, the
- 21 horizontal lines on the fuel tank, the horizontal
- 22 lines on the air cleaner, the horizontal lines on
- 23 the fan housing, and the horizontal lines on the
- 24 carburetor cover all convey the cubic appearance.
- 25 So the elimination of the four ribs neither has

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- an effect of taking that cubic appearance away.
- Q. Can you take a look at your deposition,
- 3 please.
- 4 A. Yup.
- 5 (Witness complies.)
- Q. And I'd invite you to take a look at
- 7 Page 89, starting at Line 7.
- 8 A. Okay.
- 9 Q. And I will read the questions and
- answers.
- 11 "QUESTION: Does eliminating the ribbing
- 12 from the carburetor cover change the overall
- 13 appearance of the GX engine?
- "ANSWER: No.
- 15 "QUESTION: Why not?
- 16 "ANSWER: It still maintains the overall
- 17 cubic look, and the individual components give it
- 18 that cubic look.
- 19 "QUESTION: When you say it 'maintains the
- overall cubic look, 'you're talking about height
- and width about the same, right? Of the front
- 22 view?
- 23 "ANSWER: Yes.
- 24 "QUESTION: And the components being what,
- 25 squarish and rectangular?

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- 1 "ANSWER: Complementary shapes and the cubic
- 2 look, yes.
- 3 "QUESTION: Boxy? Mr. Fujita used the word
- 4 'boxy.'
- 5 ANSWER: I don't like 'boxy.'
- 6 "QUESTION: Mr. Fujita used the word 'boxy'
- 7 to describe it.
- 8 "ANSWER: Okay. Yes."
- 9 Did I ask those questions, and did you give
- 10 those answers?
- 11 A. Yes, I did; and, yes, you did.
- 12 Q. Now, you don't know why Honda removed
- the ribs on the carburetor cover, do you?
- 14 A. No.
- 15 Q. You didn't ask anybody at Honda why
- they removed the ribs, correct?
- 17 A. No, I didn't.
- Q. As a matter of fact, you don't care why
- 19 Honda removed the ribs. Correct?
- 20 A. That's correct.
- Q. And, again, you're aware that Honda has
- 22 added a skirt to the air cleaner on its GX engine
- 23 since the trademark application. Right?
- 24 A. Yes, I am.
- Q. And your opinion is that that does not

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- 1 change the overall appearance of the engine.
- 2 Right?
- 3 A. That is correct.
- Q. And, again, the reason is that the
- 5 engine maintains its overall cubic look; that is,
- 6 it has equal height and width from the front, and
- 7 squarish or rectangular external engine
- 8 components. Correct?
- 9 MS. FRAZIER: Objection.
- 10 Mischaracterizes testimony.
- A. That skirt addition had no bearing on
- 12 length and width, height of the engine. So it
- didn't change my original position on it.
- 14 Q. Right. So your original position was
- 15 it doesn't change the overall appearance because
- 16 the engine still has its equal height and width
- 17 from the front and has squarish or rectangular
- 18 external engine components. Correct?
- MS. FRAZIER: Objection.
- 20 Mischaracterizes testimony.
- 21 A. That's correct.
- Q. Now, with regard to the beveling on the
- 23 air cleaner cover, you opine that that beveling
- 24 shown in the trademark application was a
- 25 distinctive feature of the GX engine. Right?

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- 1 A. That's correct.
- Q. Despite that, your opinion is that the
- 3 change in the beveling does not affect the
- 4 overall appearance of the GX engine. Right?
- 5 A. That's correct also.
- Q. And the reason is because it still has
- 7 that cubic look. Correct?
- 8 A. It still maintains the overall cubic
- 9 appearance even with the change to the beveling
- 10 that's been done.
- 11 Q. And when you use "overall cubic
- 12 appearance," again, you mean same height and
- width of the engine from the front view, and
- 14 rectangular or squarish external engine
- 15 components. Correct?
- MS. FRAZIER: Objection.
- 17 Mischaracterizes testimony.
- 18 A. That's correct.
- 19 Q. And you don't know why Honda changed
- 20 the beveling on the air cleaner cover, do you?
- 21 A. No, I don't.
- Q. You didn't ask anybody why it changed
- 23 the beveling on the air cleaner cover. Correct?
- 24 A. That's correct.
- Q. And, in fact, you don't care why Honda

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- 1 changed the beveling on the air cleaner cover.
- 2 Correct?
- 3 A. That's correct.
- Q. And, again, Honda changed the beveling
- on the GX fuel tank since the trademark
- 6 application. Correct?
- 7 A. That is correct also.
- Q. And you had opined that the beveling on
- 9 the fuel tank that was shown in the trademark
- 10 application was a distinctive feature of the GX
- 11 engine. Correct?
- 12 A. That is also correct.
- 13 Q. Despite that, it's your opinion that
- 14 the change in the beveling on the fuel tank since
- 15 the trademark application does not change the
- overall impression of the GX engine. Correct?
- 17 A. That is correct.
- Q. And the reason is that the GX engine
- 19 retains its equal height and width and
- 20 rectangular or squarish external engine
- 21 components. Correct?
- 22 A. That is also correct.
- Q. And you don't know why Honda made this
- 24 change. Right?
- 25 A. That's correct.

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- 1 Q. You didn't ask anybody why it made the
- 2 change. Correct?
- 3 A. That is correct.
- Q. And you don't care why Honda made it.
- 5 Correct?
- 6 A. That is correct also.
- 7 Q. And you're aware that Honda made the
- 8 fuel tank on the GX slightly taller since the
- 9 trademark application. Right?
- 10 A. Yes.
- 11 Q. And you don't know why they made the
- 12 engine -- the fuel tank on the GX engine slightly
- 13 taller than is shown in the trademark
- 14 application, do you?
- 15 A. No, I don't.
- 16 Q. You didn't ask anybody at Honda about
- 17 that. Correct?
- 18 A. I did not.
- 19 Q. And you don't care why Honda made the
- fuel tank in the GX engine slightly taller than
- in the trademark application. Right?
- 22 A. That's correct also.
- Q. And it's your opinion that making this
- 24 change did not change the overall impression of
- 25 the engine. Correct?

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- 1 A. That's correct.
- Q. And, again, the reason is that the
- 3 engine maintained its same height and width from
- 4 the front and its external parts were still
- 5 rectangular or squarish in appearance. Right?
- 6 MS. FRAZIER: Objection.
- 7 A. Right. That is correct.
- 8 Q. Now, in your opinion, if Honda did
- 9 change the height of the fuel tank more, it could
- 10 change the overall impression of the engine.
- 11 Right?
- 12 A. It depends on how much they change the
- 13 height.
- 14 Q. Right. And how much of a change would
- 15 be -- in your view, how much of a change would be
- 16 necessary to change the overall impression is
- 17 arbitrary. Right?
- 18 A. Yes.
- 19 Q. Now, would changing the relative
- 20 alignment of the seam on the GX fuel tank and the
- 21 GX air cleaner cover change its overall
- 22 impression?
- 23 A. By changing both of them?
- Q. Yes. If you change the relative
- 25 alignment.

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- 1 A. Oh, yes. That would affect the
- 2 continuity of the lines.
- 3 Q. Would changing the -- and because --
- 4 I'll withdraw that question.
- 5 And changing the size of the fuel tank and
- 6 air cleaner cover proportionately could change
- 7 the overall cubic design of the GX engine.
- 8 Right?
- 9 A. Read that -- repeat that.
- 10 Q. Sure. Changing the size of the fuel
- 11 tank and the air cleaner cover proportionately
- 12 could change the overall cubic design of the
- 13 engine. Correct?
- A. By "proportionately," you mean bigger
- or smaller or either?
- 16 Q. Either, bigger or smaller.
- 17 A. It could change the overall look.
- 18 Sure.
- 19 Q. And how much of a change --
- 20 proportional change of the fuel tank and air
- 21 cleaner cover would change the overall impression
- of the engine, in your opinion, is arbitrary.
- 23 Correct?
- 24 A. Yes. I'm not a stylist. We can
- 25 probably get the stylist group to do that or

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- 1 comment on that.
- Q. If Honda kept the same dimensions for
- 3 the air cleaner cover and fuel tank, but reversed
- 4 their positions, the engine, in your opinion,
- 5 would maintain its overall cubic design.
- 6 Correct?
- 7 A. Yes.
- 8 Q. Now, taking a look at the engine on
- 9 Exhibit No. 6, does it appear as though the fuel
- 10 tank extends below the lowest point of the air
- 11 cleaner cover?
- 12 A. On this particular air cleaner cover,
- 13 the fuel tank is below.
- 14 Q. So if you -- so if you reverse those
- 15 two, and kept the size of the fuel tank the same
- 16 size, the engine would be less compact. Right?
- 17 A. If you reverse the two, there would be
- 18 changes to some of the components in order to get
- 19 them to fit. Without doing some investigation at
- 20 this time, again, it's hard to say. It's really
- 21 hard to answer.
- Q. Okay. And if Honda were to make its
- engine taller, but kept the same width, it could
- 24 also have changed the overall impression of the
- 25 engine, in your opinion. Right?

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- 1 A. If by "taller" you mean going up higher
- with the fuel tank and the air cleaner cover,
- 3 maintaining the same horizontal level in both,
- 4 I'm sure you could increase it somewhat and still
- 5 maintain the same look.
- Q. But you might increase it, but there is
- 7 a point where you can increase it where you
- 8 wouldn't maintain the same look. Right?
- 9 A. Yes. There's a point where you would
- increase it much higher, and it would change the
- 11 look completely.
- 12 Q. Well, if you increase it -- both of
- them somewhat, wouldn't the engine be taller than
- 14 it is wider?
- 15 A. It depends on how much you increase it.
- 16 If I increase it a half inch, it might not look
- 17 like as tall, or if I increase it 6 inches, it's
- going to look taller.
- 19 Q. Would you agree that, in your opinion,
- 20 how much you would have to increase it in order
- 21 to change the impression would be arbitrary?
- 22 A. There's a point of where that look
- 23 changes. Yes. I don't know what that is.
- Q. Would that point be different for a
- 25 particular stylist or a particular consumer than

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- 1 it might be for another one?
- MS. FRAZIER: Objection. Calls for
- 3 speculation.
- A. Sure. It's in the eye of the beholder.
- Q. As are all of the changes that you
- 6 talked about, right? They -- what would change
- 7 the appearance would be in the eye of the
- 8 beholder. Right?
- 9 A. In the general public. The trained eye
- 10 that we talked about can pick out some of these
- 11 small changes.
- 12 Q. It's your opinion that color can be a
- 13 source identifier for Honda engines. Right?
- 14 A. Yes.
- Q. And based on your experience with Honda
- engines in the market, a red, white, and black
- 17 engine is what Honda considers its primary color
- 18 combination for its engines. Right?
- MS. FRAZIER: Objection.
- 20 A. I would -- I would think that's their
- 21 standard color combination. Yes. Although I've
- 22 seen other Honda engines that are different
- 23 colors.
- Q. But its standard color combination is
- 25 red, white, and black?

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- 1 A. Yes.
- Q. It's your opinion that a designer of
- 3 general-purpose utility engines first designs the
- 4 internal engine components, then adds the
- 5 external components, and after that, adds
- 6 stylized engine appearance. Correct?

Im

- 7 A. Yeah. Designs the internal, as on the
- 8 external parts, and then we get the stylist in,
- 9 and they do their styling and works with the
- 10 engineering department.
- 11 MR. NOWAKOWSKI: What is our next
- 12 number? 29.
- 13 (Discussion off the record.)
- 14 MR. HERRING: It's already marked.
- 15 MR. NOWAKOWSKI: Never mind.
- 16 Q. Now, in the course of your work on this
- 17 matter, you reviewed engines or pictures of
- 18 engines by many manufacturers in the utility
- 19 engine market. Right?
- 20 A. Yes, I have.
- Q. And I've put in front of you what's
- 22 been previously marked as Opposer 25. Do you see
- 23 that?
- 24 A. Yes, I do.
- Q. And do you recognize those as pictures

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- of utility engines in the marketplace?
- A. Yes, I do.
- Q. And taking a look at that, you agree
- 4 that the Briggs 550 engine, the Briggs 750
- 5 engine, the Generac engine, the V Power Equipment
- engines, the Jaingdong, J-A-I-N-G-D-O-N-G,
- 7 engines, the Lifan engines, the Blue Max, and All
- 8 Power engines all have an overall cubic
- 9 appearance. Correct?
- 10 A. In my deposition, when I was referring
- to this, I was referring to the cubic look with
- 12 respect to a geometric figure, length versus
- 13 height. And that's what I used in my comments in
- 14 my -- in my deposition.
- 15 When I look at these engines with respect to
- 16 the overall cubic appearance that's discussed in
- 17 the mark, then I do not agree that they have an
- overall cubic appearance.
- 19 Q. So with respect to the Briggs 550 --
- well, let me withdraw that question.
- 21 Take a look at your deposition, please.
- 22 A. Okay.
- 23 Q. And Page 73.
- 24 A. Okay.
- 25 (Witness complies.)

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- Q. Did I ask you this question -- or these
- questions, and did you give me these answers?
- 3 "QUESTION: I will withdraw that question.
- 4 Which engines in Exhibit 225, in your view, have
- 5 a cubic appearance?"
- 6 A. What line?
- 7 Q. I'm sorry. Line 2.
- 8 A. Okay.
- 9 Q. "MS. FRAZIER: Objection.
- 10 "ANSWER: I think the Briggs 550 has a cubic
- 11 appearance, from what I can see. I would suspect
- 12 that the Briggs 750 has the same look. The
- 13 Kohler Command Pro does not have a cubic look.
- 14 "QUESTION: Why not?
- 15 "ANSWER: It looks too tall to me. And the
- 16 Kohler SH265, because of the angles, doesn't have
- 17 a cubic look to me.
- 18 "QUESTION: What do you mean, because of the
- 19 angles?
- 20 "ANSWER: Angles on the muffler and air
- 21 cleaner on the left side. The Generac Engine, V
- Power engine, V Power Equipment, Saingdong,
- Jaingdong, Lifan, Blue Max, and All Power have a
- 24 cubic look to me."
- Did I ask you those questions, and did you

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- 1 answer those questions?
- A. Yes. You asked me them, and I answered
- 3 them. As I stated before, when I was answering
- 4 them, I was using the cubic definition of a
- 5 geometric cube, length versus height.
- 6 Q. So, in your opinion, the engines that
- 7 you designated as having an overall cubic design
- 8 have approximately the same height and the same
- 9 width. Is that correct?
- 10 A. On these engines that I mention in
- 11 here, yes.
- 12 Q. And are the component parts on those
- same engines generally rectangular or squarish?
- 14 A. I'd have to look at --
- MS. FRAZIER: Objection.
- 16 A. I'd have to look at each one, Ken, to
- 17 determine if they're rectangular or squarish.
- 18 Again, I wasn't looking at the component parts.
- 19 Like I said, I was looking at the length versus
- 20 width on that comment.
- MS. FRAZIER: Ken, do you have a better
- 22 copy of this?
- MR. NOWAKOWSKI: This is all I've got.
- 24 I'm sorry. I'm looking at the same one.
- Q. As to the Briggs 550, the Briggs 750,

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- the Generac, the V Power Equipment engines,
- Jaingdong, Lifan, Blue Max and All Power engines,
- 3 are the fuel tank, the air cleaner, and fan --
- 4 air cleaner cover and fan cover generally in the
- 5 same locations relative to each other as on the
- 6 GX engine?
- 7 MS. FRAZIER: Objection.
- 8 A. Yes. In a general location.
- 9 Q. By the way, your testimony is that the
- 10 Kohler 265 engine is not cubic in appearance.
- 11 Right?
- 12 A. That's what I stated. Yes.
- 13 Q. You do agree that a cube is the most
- 14 efficient way to package something because it
- 15 affords maximum volume for a given surface area.
- 16 Correct?
- 17 A. Yes.
- 18 Q. And you agree that the face of a cube
- 19 is a square. Right?
- 20 A. Yes.
- Q. And you agree that a square is the most
- 22 compact two-dimensional figure because it affords
- the maximum surface area for a given perimeter.
- 24 Correct?
- 25 A. You said a square?

[Page 209] 1 Q. Yeah. 2 Α. Yes. 3 And you agree that the Honda GX engine Q. in the trademark application, with its cubic 4 5 design, is the best design, as far as a compact 6 engine. Correct? 7 Compact and cubic are different. 8 whether it's the best design, I couldn't really 9 say. 10 Can you take a look at your deposition, Q. 11 please. 12 Α. Mm-hmm. 13 (Witness complies.) 14 And start at Page 104, Line 19. Q. 15 Α. Okay. 16 "QUESTION: Is the design that you see Q. 17 on Exhibit No. 3" -- and then I'll put a 18 parenthetical that Exhibit No. 3 is the trademark 19 application now shown as Applicant Exhibit No. 6 20 -- "the best design as far as compact engine?" 21 Ms. Frazier objected. 22 "ANSWER: How would you define 'best'?" 23 "QUESTION: Meaning the most compact, the 24 neatest. 25 "MS. FRAZIER: Objection.

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- 1 ANSWER: Maybe on one or two planes, not
- 2 necessarily all planes.
- 3 "QUESTION: Okay. But on one or two of the
- 4 planes?
- 5 "ANSWER: Possibly, yes."
- 6 Did I ask those questions, and did you give
- 7 me those answers?
- 8 A. Yes, you did; and, yes, I did.
- 9 Q. And what are the one or two planes that
- you're talking about there in your answer?
- A. I would think the neatest planes would
- 12 be the top. We're discussing by best --
- 13 Q. Yup.
- 14 A. -- the best as neatest.
- 15 Q. So the top, as you face the front.
- 16 Yup.
- 17 A. Yes.
- 18 Q. And what about the other planes?
- 19 MS. FRAZIER: Objection.
- 20 A. I would say the front plane, as you see
- 21 here.
- Q. Okay. Facing it, the front plane?
- A. Mm-hmm.
- Q. Now, you've testified that you've
- 25 designed engines with fuel tanks at Briggs &

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- 1 Stratton which overhang the fan cover. Right?
- 2 A. Yes.
- Q. All of those engines require the
- 4 addition of some form of cantilever support which
- 5 required an additional part and an additional
- 6 expense. Correct?
- 7 A. Not all of them.
- 8 Q. Most of them?
- 9 A. Some of them, yes. If you start
- 10 overhanging quite a lot, then you need some
- 11 additional support.
- 12 Q. It's your opinion that the fan cover in
- the shape shown on the GX engine in the trademark
- 14 application directs cool air to the hot parts of
- 15 the engine first, the carburetor, and then the
- 16 cylinder head and cylinder before it goes back to
- the back of the engine where the muffler is.
- 18 Right?
- 19 A. The fan cover directs the air to the
- 20 hottest part of the engine. It isn't necessarily
- 21 a carburetor, but you're directing it towards the
- 22 cylinder, cylinder head, and then back side of
- 23 the muffler.
- Q. And it's the fan cover in the shape
- 25 shown on the GX engine in the trademark that does

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- 1 that. Correct?
- 2 A. That's correct. On the Honda GX
- 3 engine.
- 4 Q. And the muffler can be cooled with
- 5 warmer air. Correct?
- 6 A. The muffler can be cooled with ambient
- 7 air. Sure.
- Q. Okay. And, in your opinion, it's the
- 9 slant of the fan cover of the GX engine that
- 10 moves the air towards the cylinder head?
- A. On the GX fan cover, the slant directs
- 12 the air towards the cylinder, cylinder head area.
- 13 There has to be other parts underneath there,
- 14 baffles, on all these engines, that actually turn
- 15 the air.
- 16 Q. Can you take a look at your deposition,
- 17 page 120.
- 18 (Witness complies.)
- 19 A. All right.
- Q. Specifically, Line 24.
- 21 "QUESTION: Is it fair to say that the slant
- 22 in the fan cover" --
- 23 I'll withdraw that. We'll start at 19.
- 24 "QUESTION: You recall we were -- at one
- point during my questioning, we talked about the

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- 1 fan cover directing air to the hot parts of the
- 2 engine?
- 3 "ANSWER: Yes.
- 4 "QUESTION: Is it fair to say that the slant
- 5 in the fan cover facilitates that?
- 6 "MS. FRAZIER: Objection.
- 7 "ANSWER: Not necessarily, no.
- 8 "QUESTION: Would you say could it?
- 9 "ANSWER: It could, or you could use bevels
- 10 to direct it or to wherever you want to.
- "QUESTION: But if you don't have the
- bevels, does the slant of the air cover
- 13 facilitate the flow of air to the cylinder head?
- "MS. FRAZIER: Objection."
- 15 "ANSWER: The slant on the GX engine is
- 16 moving the air towards the cylinder head, yes."
- 17 Did I ask you those questions? Did you
- 18 answer them in that way?
- 19 A. Yes, you asked them, and I answered
- 20 them. And since that time, I've done some
- 21 thinking, and the fan is spinning air at the
- surface of the fan housing, the outside surface.
- You actually have to get the fan turned towards
- 24 the cylinder head, towards the cylinder to cool
- 25 it. So there has to be some additional means to

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- 1 turn that air. That's in addition to what I
- 2 talked about at my earlier deposition.
- Q. Okay. So the slant of the fan does, in
- 4 fact, facilitate the direction of the air to the
- 5 cylinder head in the GX engine, but some other
- 6 parts may also contribute. Correct?
- 7 A. It brings it towards the cylinder head.
- 8 And I'm sure there's other components inside
- 9 there that are directing it to the hot spots.
- 10 Q. Okay. You agree that the recessed area
- where the control levers are located on the GX
- 12 engine in the trademark application permits easy
- operator access to the controls. Correct?
- 14 A. Yes.
- 15 Q. You also agree that the recessed
- 16 controls are less likely to be damaged than
- 17 non-recessed controls, because they are not
- 18 protruding. Correct?
- 19 A. No. I think I've said that the
- 20 controls can be mounted outside on the surface
- 21 and still perform adequately and not be damaged.
- 22 As I mentioned, we usually test engines with
- 23 respect to damage when we are starting the engine
- or when it's out in the field.
- Q. I know that's how you testified today

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- on direct examination. But I did take your
- deposition on June the 5th, and I'd ask you to
- 3 take a look at the deposition, please.
- 4 A. Okay.
- 5 Q. Look at Page 117.
- A. Okay.
- Q. And did I ask this question, starting
- 8 at No. 9:
- 9 "QUESTION: Are recessed controls less
- 10 likely to be damaged because they are not
- 11 protruding?
- "ANSWER: Possibly, yes."
- 13 Did I ask that question, and did you answer
- 14 that question that way?
- 15 A. Yes.
- 16 Q. All right. You also agree that placing
- 17 the air cleaner on top of the engine allows for
- easy maintenance in applications which allow
- 19 access from the top. Right?
- 20 A. Yes. If you have an application that
- 21 requires a top-mounted air cleaner, that would be
- 22 the most likely place to put it.
- Q. In engines where the air cleaner cover
- is plastic, it's your view that it's important to
- 25 keep the air cleaner cover a certain distance

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- 1 from the muffler so it won't melt. Right?
- A. Yes. The muffler is hot. If the air
- 3 cleaner cover is plastic, there has to be a
- distance so it doesn't distort or melt or cause
- 5 problems.
- Q. And the placement of the air cleaner
- 7 cover relative to the muffler in the GX engine
- 8 accomplishes that. Right?
- A. To my best knowledge, yes.
- Q. And you agree that the placement of the
- 11 carburetor in the front of the GX engine allows
- 12 for cool air to be induced into the engine versus
- 13 air from the back side of the engine, which is
- 14 hotter. Correct?
- 15 A. The carburetor takes air in from the
- 16 air cleaner and element, and that's above the
- 17 carburetor on the GX engine. So it's taking in
- 18 cool air than it would be on the back side of the
- 19 engine.
- Q. And you do agree that inducing cooler
- 21 air into the GX engine improves volumetric
- 22 efficiency of the engine. Right?
- A. Yes, I do.
- Q. You know of Professor Kevin Hoag.
- 25 Correct?

[Page 217] 1 MR. NOWAKOWSKI: That's H-O-G-E. 2 MS. FRAZIER: Objection. Outside the 3 scope. MR. HERRING: H-O-A-G. 4 5 MR. NOWAKOWSKI: H-O-A-G. I'm sorry. He was on the other case that I 6 Α. Yes. 7 worked on for Honda. 8 Q. And you agree --9 MS. FRAZIER: I don't think it showed 10 up on the record. Objection to this questioning 11 as outside the scope of Mr. Mieritz's direct 12 exam. 13 You agree that Professor Hoag is an Ο. 14 expert in the internal combustion design. Correct? 15 16 I believe he was retained as an expert Α. 17 in the internal combustion engine theory. Not 18 necessarily design. 19 Q. Take a look at your deposition, please. 20 Α. Okay. 21 (Witness complies.) 22 Q. 117. 23 Α. Okay. 24 Q. Last line. That's 25. 25 Α. Okay.

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- 1 "QUESTION: Do you consider him," referring
- 2 to Professor Hoag, "an expert in general-purpose
- 3 engine design?
- 4 "MS. FRAZIER: Objection.
- 5 "ANSWER: I think he's more of an expert in
- 6 the internal combustion design."
- 7 Did I ask that question, and did you give
- 8 that answer?
- 9 A. You asked that question, and I answered
- it. And that's the same answer I just gave you.
- 11 Q. All right. And, by the way, you
- 12 reviewed Professor Hoag's declaration in support
- 13 of the trademark application in connection with
- 14 your opinions in this case. Didn't you?
- 15 A. I reviewed his declaration back when --
- in 2007 or whenever we were on the other case.
- 17 I'm sure I looked at it in this case also.
- 18 Q. Now, on direct examination, you were
- 19 asked some questions about your contacts with
- OEMs over the years and dealers over the years.
- 21 Correct?
- 22 A. Yes.
- Q. And you were asked some questions about
- 24 how they recognize or whether they recognize the
- 25 Honda design. Do you remember those questions?

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- 1 A. Yes, I do.
- Q. Now, how many times did you say that
- 3 you talked to OEMs over that time?
- 4 A. I think I stated approximately, over
- 5 the years I've been there, maybe 20 times that I
- 6 went to the OEMs.
- 7 Q. And how about the dealers?
- 8 A. The dealers were close to 100, because
- 9 I would go there myself oftentimes when I was
- traveling and on vacation, just talk to people.
- 11 Q. And that was over the 40 years that you
- 12 worked at Briggs?
- 13 A. Yes. Mm-hmm.
- 14 Q. Now, you're not an expert in market
- 15 research, either by education or experience, are
- 16 you?
- 17 A. No, I'm not.
- 18 Q. And you've never designed, conducted or
- 19 analyzed a consumer survey, have you?
- 20 A. No, I haven't.
- Q. And you have no opinion, to a
- 22 reasonable degree of scientific probability
- within the area of consumer research, that OEMs,
- 24 distributors, dealers, or other potential
- customers would immediately recognize the look of

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- the GX engine and associate it with Honda, do
- 2 you?
- 3 A. Go back to the beginning. What did you
- 4 say? I have no opinion?
- Q. My question is, you have no opinion to
- 6 a reasonable degree of scientific probability,
- 7 within the area of consumer research that OEMs,
- 8 distributors, dealers, or other potential
- 9 customers would immediately recognize the look of
- 10 the GX engine and associate it with Honda --
- 11 associate it with Honda?
- 12 A. I have no scientific information, but I
- do have information in talking with the
- 14 individuals that they were able to pick out a
- 15 Honda engine versus a Briggs engine versus other
- 16 engines.
- 17 Q. So, again, the answer to my question is
- that you have no opinion, to a reasonable degree
- 19 of scientific probability within the area of
- 20 consumer research, that OEMs, distributors,
- 21 dealers, or other potential customers would
- 22 immediately recognize the look of the GX engine
- 23 and associate it with Honda. Correct?
- 24 A. That's correct.
- Q. And, in fact, you've never asked any

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- 1 OEM, distributor, dealer, or other potential
- 2 customer what characteristics of an engine, if
- 3 any, cause them to recognize the engine as a
- 4 Honda. Correct?
- 5 A. I think I've discussed it with OEMs,
- 6 that there are characteristics that they can pick
- 7 out. Otherwise, I wouldn't have an opinion that
- 8 they were able to pick out the Honda engine.
- 9 Q. But it's true that you don't remember
- 10 ever asking an OEM, distributor or a dealer what
- 11 characteristics of an engine causes them to
- 12 recognize the engine as a Honda. Correct?
- 13 A. Specifically, I don't remember if we
- 14 discussed what characteristic, other than the
- overall visual look of an engine from a distance.
- 16 Q. You agree that certain applications in
- 17 the general-purpose utility engine market require
- 18 a high-mount air cleaner. Right?
- 19 A. Yes. Certain applications require a
- 20 high-mount.
- Q. As to those applications, an engine
- 22 manufacturer needs to sell an engine with a
- 23 high-mount air cleaner to compete. Correct?
- 24 A. Yes.
- Q. And have you got the exhibits in front

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- 1 of you?
- 2 A. The pictures?
- Q. Yes. What I'd like you to take a look
- 4 at are the pictures of engines that you were
- 5 shown by counsel on direct examination, and I
- 6 believe that's Exhibit Applicant's 51,
- 7 Applicant's 44, Applicant's 43, Applicant's 24,
- 8 Applicant's 23, Applicant's 21, and
- 9 Applicant's 17. Do you have those in front of
- 10 you?
- 11 A. Yes, I do. The numbers are in my mind.
- 12 I'll probably be dreaming about them tonight.
- 13 Q. Me too. Which of the engines depicted
- 14 on those pictures contain a side-mount or panel
- 15 air cleaner cover or air cleaner?
- 16 A. So you want me to pick out which have a
- 17 panel mount air cleaner?
- 18 Q. Yeah.
- 19 A. Front panel?
- Q. Either front panel or a side mount.
- 21 MS. FRAZIER: Objection.
- 22 A. I don't know what side mount is. It's
- 23 the first time I've heard that.
- Q. All right. Let's stick with the front,
- 25 the panel.

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- 1 A. The Intek --
- 2 Q. Which --
- 3 A. -- Exhibit 21, has a front panel mount.
- 4 Q. All right.
- 5 A. The Exhibit 24 has a front-mounted air
- 6 cleaner. It's not necessarily a panel mount.
- 7 Exhibit 43 has a front-mounted panel mount. And
- 8 Exhibit 51 has a front-mounted panel mount air
- 9 cleaner.
- 10 Q. So as to Exhibits 51, 43, 24, 21 -- did
- 11 I miss one?
- 12 A. No.
- 13 Q. As to those, as to the engines depicted
- on those exhibits, those engines would not be
- 15 alternatives for engines in applications
- 16 requiring top-mount air cleaners. Correct?
- 17 A. I would say three of them, for sure,
- 18 are front mount. The Vanguard 9-horsepower is
- 19 kind of like in between. Whether you could get
- that air cleaner cover off from the top, it's
- 21 kind of a gray area.
- 22 Q. Now, as to Exhibits 17, 23, and 44,
- which have top-mount air cleaners, correct?
- 24 A. Yes.
- Q. As to those engines, the fan and fan

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- 1 cover, the fuel tank, the carburetor, and the air
- 2 cleaner and air cleaner cover are generally in
- 3 the same position as the -- as those external
- 4 components on the GX engine. Correct?
- 5 A. That is correct.
- Q. By the way, you testified that there
- 7 were differences between Applicant Exhibit 17 and
- 8 Applicant Exhibit 44 from the trademark
- 9 application, Exhibit No. 6. Right?
- 10 A. That there were differences on 17 and
- 11 44 from the trademark exhibit?
- 12 Q. Yeah.
- 13 A. I think I talked about the air cleaner
- 14 and the fuel tank. Yes. Yes.
- 15 Q. And on direct examination, you went
- 16 through them --
- 17 A. Yes.
- 18 Q. -- and explored the differences between
- 19 the fuel tank and the lines of the fuel tank, for
- 20 example, and the differences in the air cleaner
- 21 and the carburetor and the fan cover on those
- exhibits from the trademark, Exhibit No. 6.
- 23 Right?
- 24 A. Yes, I did.
- Q. And certainly nobody taking a look at

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- 1 Applicant's Exhibit 17 and Applicant Exhibit 44,
- in your opinion, would mistake those engines,
- 3 those Kohler engines as a Honda GX, would they?
- 4 A. I don't think so.
- 5 Q. In other words, consumers of
- 6 general-purpose engines would likely not be
- 7 confused about whether the Kohler engine, the
- 8 Command Pro in Applicant 17 and the Command Pro 6
- 9 in Applicant's 44, were Honda GX engines. Would
- 10 they?
- MS. FRAZIER: Objection.
- 12 A. Go back to the beginning.
- MR. NOWAKOWSKI: Can you read that and
- 14 see if it made sense.
- 15 (The question was read by the
- 16 reporter as requested.)
- 17 A. I believe they would be able to
- 18 determine the difference.
- 19 Q. And that's based in large part on
- 20 the -- on the distinguishing characteristics that
- you testified to in response to counsel's
- 22 questions on direct exam. Correct?
- 23 A. That's correct.
- MR. NOWAKOWSKI: Can we take five?
- 25 Thank you.

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- 1 (A recess was taken.)
- 2 BY MR. NOWAKOWSKI:
- Q. Mr. Mieritz, we took a short break.
- 4 We're back on the record. I have a few more
- 5 questions for you.
- A. Sure.
- 7 Q. Do you recall that during your direct
- 8 examination, you were asked some -- to give some
- 9 examples of alternative designs for a fuel tank
- 10 position, and you testified that you could extend
- 11 the fuel tank further to the right or to the
- 12 left. Do you remember that?
- 13 A. Yes, I do.
- 14 Q. Is it fair to say that if you extended
- 15 the fuel tank further to the right, as you look
- 16 at the trademark application, that the engine
- 17 would be less compact than the engine shown in
- the trademark application, Exhibit No. 6?
- 19 A. There's a point where it becomes less
- 20 compact. There's also a point where you can
- 21 extend it, and I would think it would still be
- 22 packaged together neatly.
- 23 Q. And is the -- is the distance that you
- 24 could extend it further to the right before it
- 25 becomes less compact arbitrary?

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- 1 A. Yes. It's, again, in the eye of the
- beholder. It could be an inch. It could be
- 3 2 inches. It could be less.
- Q. Do you recall some testimony on direct
- 5 examination that you said Mr. Fujita, in his
- 6 deposition, said the fuel tank in the trademark
- 7 application reduced the capacity of the tank, the
- 8 shape of it?
- 9 A. Yes. When they did the redesign, they
- 10 lost some volume within the tank.
- 11 Q. Do you know how much?
- 12 A. No, I don't.
- Q. Do you know, based on your experience,
- 14 whether it was significant?
- 15 A. If you would look at what they did,
- 16 percentage-wise, this is a guess, maybe
- 17 5 percent.
- 18 Q. And, in any event, the fuel tank in the
- 19 redesigned version provides sufficient capacity
- 20 to meet market needs. Right?
- 21 A. Yes, it does.
- Q. Do you recall you were asked a question
- on direct examination: "Have you seen any data
- 24 indicating there's a difference in performance
- between the fan cover in Exhibit 17, 43, and 44

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- and the fan cover on the trademark GX engine?"
- 2 A. Yes.
- Q. And you said you have not seen any
- 4 data. Correct?
- 5 A. That's correct.
- 6 Q. Do you know whether any such data
- 7 exists?
- 8 A. Oh, I'm sure within the engineering
- 9 departments of the various manufacturers, there's
- 10 data that --
- 11 Q. Did you look at any of that data?
- 12 A. No, I didn't.
- Q. Did you ask for any of that data?
- 14 A. No, I didn't.
- 15 Q. Did you talk to Honda and ask them if
- 16 they have any of that data?
- 17 A. No, I didn't.
- 18 Q. You were also asked the question:
- 19 "Have you seen any data indicating that there's a
- difference in quality between the fan cover in
- 21 17 -- I'm sorry, Applicant's Exhibit 17, 43 and
- 22 44 and the trademark application GX engine?" Do
- 23 you recall that?
- 24 A. Yes.
- Q. And your answer was, no, you had not

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- seen such data?
- 2 A. That's correct.
- Q. Do you know whether any such data
- 4 exists?
- 5 A. I'm sure there's quality information
- 6 available at the companies that shows data on
- 7 those engines. Yes.
- Q. And you've never seen any of that data?
- 9 A. Not on these engines, no.
- 10 Q. And you've never asked for any of that
- 11 data?
- 12 A. That's correct.
- 13 Q. And you never asked Honda provide any
- 14 of that data?
- 15 A. That's correct.
- 16 Q. Do you even know if Honda has any of
- 17 that data?
- 18 A. I'm sure they do.
- 19 Q. And do you recall that you were asked
- 20 similar questions with respect to the data
- 21 regarding the difference -- I'll withdraw that.
- Do you recall being asked similar questions
- 23 regarding the fuel tank, air cleaner cover, and
- 24 carburetor cover?
- 25 A. What similar questions?

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- 1 Q. That is to say, whether you're aware of
- 2 any data indicating there's a difference in
- 3 performance between the fuel tank, air cleaner
- 4 cover and carburetor cover on the exhibits that
- 5 you were shown of other engines and the trademark
- 6 GX engine?
- 7 A. Yes. I remember that.
- Q. And did you ever review any such data?
- 9 A. No, I didn't.
- 10 Q. Did you ever ask for any of that data?
- 11 A. No, I didn't.
- 12 Q. Do you know whether any of that data
- 13 exists?
- 14 A. I'm sure companies have that data.
- 15 Yes.
- 16 Q. Do you know whether Honda has that
- 17 information?
- 18 A. I do not know. I only assume that they
- 19 have it.
- Q. Did you ask for that?
- 21 A. No, I didn't.
- Q. I don't recall the specific exhibit and
- engine you were discussing, but I recall at one
- 24 point counsel asked you about a difference in
- fuel tanks, and you referenced that one of the

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- fuel tanks was metal as opposed to a plastic tank
- on the GX engine. Do you recall that testimony?
- 3 MS. FRAZIER: Objection.
- 4 Mischaracterizes testimony.
- 5 A. Yes.
- 6 Q. Are you aware that the material out of
- 7 which the fuel tank is made on the GX engine is
- 8 not a part of the trademark application?
- 9 MS. FRAZIER: Objection.
- 10 A. Am I aware that the material is not a
- 11 part of?
- 12 Q. Yes.
- 13 A. Yes.
- Q. Now, you were shown Exhibit No. 21.
- 15 And in connection with questions regarding the
- 16 air cleaner cover, and you said Exhibit No. 21
- 17 doesn't even have an air cleaner cover. Do you
- 18 remember that testimony?
- MS. FRAZIER: Objection.
- 20 Mischaracterizes testimony.
- 21 A. I stated the engine in Exhibit 21 does
- 22 not have a carburetor cover.
- Q. I'm sorry. It doesn't have a
- 24 carburetor cover. And that's because the
- 25 front-mount air cleaner acts as a cover of the

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- 1 carburetor there?
- A. It mounts directly to the carburetor.
- 3 Yes.
- Q. With respect to the Briggs engine with
- 5 a top-mount air cleaner cover, you would expect
- 6 there to be a carburetor cover. Correct?
- 7 A. We don't have a picture of it, but yes,
- 8 I can picture it in my mind. Yes. There's a
- 9 picture here, 550.
- 10 Q. Sorry. Can you take a look at
- 11 Applicant Exhibit No. 46.
- 12 A. What did it look like?
- 13 Q. It's your demonstrative.
- 14 A. I don't think they're out here anymore.
- 15 THE WITNESS: Do you have my
- 16 demonstrative?
- MS. FRAZIER: In that pile.
- 18 A. I'm getting there. Forty-seven, 46.
- 19 All right.
- Q. Do you recall that you were asked
- 21 questions about this, what was referred to as the
- 22 demonstrative exhibit? Correct?
- 23 A. Yes.
- Q. And you testified that this exhibit
- 25 showed alternative control locations on engines

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- other than the GX engine. Correct?
- A. Yes. It showed where you could mount
- 3 the controls on other engines.
- Q. Now, you've got a blue circle around
- 5 the -- some controls on the Kohler Command Pro.
- 6 Correct?
- 7 A. Yes.
- Q. And the control -- there are controls,
- 9 in fact, in a recessed area inside that blue
- 10 circle on the Command Pro. Correct?
- 11 A. Yes.
- 12 Q. And those controls are the choke and
- 13 the fuel gauge or control. Correct?
- 14 A. The choke and the fuel shutoff.
- 15 Q. Okay. And those are located in a
- 16 recessed area in the Command Pro on the
- 17 carburetor cover. Correct?
- 18 A. Yes, they are.
- 19 Q. And that's the same place they are on
- 20 the Honda GX engine. Correct?
- 21 A. Similar, yes.
- 22 (Discussion off the record.)
- Q. Finally, Mr. Mieritz, do you recall
- 24 testimony on your direct examination regarding
- 25 the manufacturing costs of the engine shown --

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- 1 the alternative or other engines that were shown
- 2 to you by counsel versus the manufacturing costs
- 3 for the aspects of the GX in the trademark
- 4 application?
- 5 A. I recall discussing that, yes.
- 6 Q. Have you ever reviewed any documents
- 7 regarding any of the engines shown in the
- 8 exhibits that were shown to you today of other
- 9 engines in the marketplace regarding the
- 10 manufacturing costs for the components of those
- 11 engines?
- 12 A. All the non-Briggs engines, I have not
- seen any manufacturing costs.
- 14 Q. And with regard to the Briggs engines,
- you haven't seen any since you left Briggs in
- 16 2006. Is that fair?
- 17 A. That's correct. But I have a general
- 18 knowledge from that of what a part costs or could
- 19 cost or if there was changes to it, etc.
- Q. But with respect to the non-Briggs
- 21 engines, you don't -- you've never looked at any
- 22 documents regarding manufacturing costs for
- 23 components. Correct?
- 24 A. That's correct.
- Q. Have you ever asked for any of those

[Page 235] 1 materials or any of those documents? 2 No, I haven't. Α. 3 Do you know whether they exist? Q. I'm sure they have to exist throughout Α. 5 the companies. 6 Do you know whether Honda has those 7 documents or some of those documents that would 8 show that? Α. I'm sure Honda has manufacturing costs 10 of all their components. 11 Have you ever asked Honda for that Q. information? 12 13 Α. No, I haven't. 14 Have you ever talked to Mr. Fujita Q. 15 about any of that? 16 No, I haven't. Α. 17 MR. NOWAKOWSKI: That's all I've got. 18 Thank you, Mr. Mieritz, I'm all done. 19 THE WITNESS: Thank you. 20 (Discussion off the record.) 21 (A recess was taken.) 22 REDIRECT EXAMINATION 23 BY MS. FRAZIER:

Q.

Α.

Hi.

24

25

877-479-2484

Good afternoon.

[Page 236]

- 1 Q. Mr. Mieritz, you were asked some
- questions about Exhibit 191-A, a Honda planning
- document from 1981. Could you pull that exhibit
- 4 out, please.
- 5 A. Yes.
- 6 (Witness complies.).
- 7 A. Okay. I have it.
- 8 Q. Were you involved with authoring
- 9 Exhibit 191-A?
- 10 A. No, I wasn't.
- 11 Q. As between you and Mr. Fujita, who was
- 12 better able to explain what Honda meant by
- certain statements in 191-A?
- 14 A. I'm sure --
- MR. HERRING: Objection.
- 16 A. I'm sure Mr. Fujita is better than I
- 17 am.
- 18 Q. If Mr. Fujita testified about what
- 19 certain statements in Exhibit 191-A meant, do you
- 20 have any basis to disagree with him?
- 21 A. No, I don't.
- Q. If you turn to Page 3 of the exhibit,
- 23 which the numbers at the bottom should be
- 24 57927 --
- 25 A. Yes.

[Page 237] 1 -- if you look at that page under Q. 2 Confidential: Attorney's Eyes Only 3 Confidential: Attorney's Eyes Only Do you see that? 4 Α. Yes. Based on your review of Mr. Fujita's 5 Q. 6 deposition testimony in this case, do you have an 7 understanding as to whether or not that refers to 8 Confidential: Attorney's Eyes Only 9 Α. I would suspect --10 MR. NOWAKOWSKI: Objection. Go ahead. 11 Confidential: Attorney's Eyes Only Α. Confidential: Attorney's Eyes Only 12 13 Confidential: Attorney's Eyes Only 0. 14 Confidential: Attorney's Eyes Only 15 Confidential: Attorney's Eyes Only 16 Confidentia 17 MR. HERRING: Objection. 18 MR. NOWAKOWSKI: Objection. 19 Α. No. Confidential: Attorney's Eyes Only 20 Confidential: Attorney's Eyes Only 21 Based on your review of this document, 0. 22 is there any indication that Honda adopted the 23 overall cubic design in Applicant's Exhibit 6 in 24 order to achieve a compact engine?

25

Objection.

MR. NOWAKOWSKI:

[Page 238]

- 1 A. The overall cubic design to achieve a
- 2 compact, I would think those are two different
- 3 things that we're talking about. Compact and
- 4 overall cubic design.
- Q. In your opinion, is the overall cubic
- 6 design shown in Applicant's Exhibit 6 necessary
- 7 to achieve reduced engine height?
- 8 A. No.
- 9 Q. In your opinion, is the overall cubic
- styling shown in Applicant's Exhibit 6 necessary
- for good mountability?
- 12 A. No.
- 13 Q. In your opinion, is the overall cubic
- 14 design in Applicant's Exhibit 6 necessary to
- achieve a lightweight engine?
- 16 A. No.
- 17 Q. Is the overall appearance -- cubic
- appearance in Applicant's Exhibit 6 necessary in
- order to improve performance?
- A. No, it isn't.
- Q. Is the overall cubic appearance in
- 22 Applicant's Exhibit 6 necessary to improve
- 23 quality?
- 24 A. No.
- Q. Is the overall cubic appearance in

[Page 239]

- 1 Applicant's Exhibit 6 necessary to reduce cost?
- 2 A. No.
- Q. And based on your review of 191-A, is
- 4 there any indication that Honda adopted the
- 5 overall cubic design shown in Applicant's
- 6 Exhibit 6 in order to achieve any of those goals?
- 7 MR. NOWAKOWSKI: Objection.
- 8 A. No, there isn't.
- 9 Q. Turn, please, to Opposer's Exhibit 26,
- 10 the Japanese utility model '344.
- 11 (Witness complies.)
- 12 A. I don't know if I have that anymore.
- No. I don't have that.
- 14 Q. Sorry, Mr. Mieritz, one more question
- 15 before we move on to that one. Is the overall
- 16 appearance of the GX engine in Applicant's
- 17 Exhibit 6 better to achieve any of the goals set
- 18 forth in 191-A than the alternatives you
- 19 discussed earlier?
- MR. HERRING: Objection.
- 21 A. Repeat that again.
- Q. Yes. Is the overall appearance of the
- engine shown in Applicant's Exhibit 6 necessary
- 24 to achieve the goals set forth in Exhibit 191-A?
- 25 A. No.

[Page 240]

- 1 Q. And is the overall appearance in the
- 2 Applicant's Exhibit 6 better than the other
- 3 designs you looked at today in terms of achieving
- 4 any of those goals?
- 5 MR. HERRING: Objection. Lacks
- 6 foundation.
- 7 A. No, not necessarily.
- 8 Q. Now, moving on to Japanese utility
- 9 model '344. Do you have that?
- 10 A. No.
- 11 Q. It's Opposer's 26.
- 12 A. No. I don't know what happened to it.
- 13 I have got only one patent. All right.
- Q. What do you understand to be the
- invention of the Japanese '344 utility model?
- MR. HERRING: Objection.
- 17 A. To me, this invention talks about
- serviceability of certain components within the
- 19 engine design, ease of maintenance, etc.
- Q. Does the Japanese '344 application
- 21 discuss the styling of the engine?
- A. No, it doesn't.
- Q. Does the Japanese --
- 24 MR. HERRING: Objection.
- 25 Q. -- '344 application describe or claim

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- 1 any of the elements you identified earlier as
- 2 contributing to the overall cubic appearance of
- 3 the GX engine in Honda's application?
- 4 MR. HERRING: Objection. Vague.
- 5 MR. NOWAKOWSKI: Objection.
- A. No, it doesn't.
- 7 Q. Do any of the figures in the Japanese
- 8 '344 application show an engine from the same
- 9 front view perspective as is shown in Honda's
- 10 trademark application?
- A. No, it doesn't.
- 12 Q. If you could turn to Figure 1 in the
- Japanese '344 application.
- 14 (Witness complies.)
- 15 A. Okay.
- 16 Q. Is the beveling shown on the fuel tank
- 17 in Applicant's Exhibit 6, does that appear in
- Figure 1 on the '344 application?
- 19 A. No. The figure shows a radius on top
- of the fuel tank.
- 21 Q. Does the beveling on the air cleaner
- 22 cover in Applicant's Exhibit 6 appear in Figure 1
- of the '344 application?
- A. No. There's a very sharp radius on the
- 25 top.

[Page 242]

- 1 Q. Does the line you described across the
- 2 bottom portion of the air cleaner cover in
- 3 Applicant's Exhibit 6, is that visible on the
- 4 Figure 1 of the '344 application?
- 5 A. No. You could see the upper portion of
- 6 the air cleaner and the lower portion, the mating
- 7 seam is approximately 20 percent down from the
- 8 top. And it's not in line with the fuel tank
- 9 seam.
- 10 Q. Is the carburetor cover visible in
- Figure 1 of the '344 application?
- 12 A. It's not -- well, there's parts of it
- visible in Figure 1 portions. The air cleaner
- 14 base, that's about all I can really pick out.
- 15 Q. Does the recessed area with the
- 16 controls that appears in Applicant's Exhibit 6
- appear in Figure 1 of the '344 application?
- A. No, it doesn't.
- 19 Q. Other than the partial slant you
- described earlier, can you see the shape of the
- 21 fan cover in the Figure 1 of the '344
- 22 application?
- 23 A. I can see the slant, which is on the
- 24 lower right side. I can see No. 23, which is on
- 25 the left side. That's pointing to the round

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- 1 shape of the blower housing. And that actually
- 2 intersects with a horizontal line on top, beneath
- 3 the fuel tank. And you can see a partial of the
- 4 housing also. That's about all I can depict.
- Q. And are the complementary angles you
- 6 discussed earlier in conjunction with your
- 7 demonstrative exhibit visible in Figure 1 of the
- 8 '344 application?
- 9 A. No.
- 10 Q. In your opinion, does the '344
- 11 application show that the appearance of the Honda
- 12 GX engine shown in the trademark application is
- 13 functional?
- 14 A. No.
- 15 Q. If you could turn, please, to Opposer's
- 16 Exhibit 27, which is the '961 Japanese
- 17 application.
- 18 A. Okay. I don't have that one either.
- 19 Thank you. All right.
- O. What is the invention of the '961
- 21 application?
- MR. HERRING: Objection.
- A. I think the basis of these are they're
- 24 talking about where controls and levers can be
- 25 placed within the engine.

[Page 244]

- 1 Q. Does the Japanese '961 application
- describe any advantages to having the controls on
- 3 the engine recessed?
- 4 A. To the best of my knowledge, no.
- Q. Well, you can take a moment and read
- 6 through it.
- 7 A. Did you say within the claims?
- Q. Does the '961 application anywhere
- 9 describe any advantages to having the controls on
- 10 the engine recessed?
- 11 A. It states that the start and stop
- 12 operations are required to be operated
- 13 separately; however, for instance, the valve is
- 14 conveniently arranged in a different plane from
- 15 that of the recoil starter. And the choke and
- 16 throttle are also conveniently arranged in
- 17 different planes.
- Q. Does the '961 application discuss
- 19 recessed controls?
- A. No, it doesn't.
- 21 Q. Does the '961 application discuss the
- 22 styling of the engine?
- A. No, it doesn't.
- Q. Does the '961 application describe or
- 25 claim any of the elements you identified earlier

[Page 245]

- 1 as contributing to the overall cubic appearance
- of the GX engine in Honda's application?
- 3 MR. NOWAKOWSKI: Objection.
- 4 A. No, it doesn't.
- 5 Q. In your opinion, does the '961
- 6 application show that the appearance of the GX
- 7 engine in Honda's trademark application is
- 8 functional?
- 9 A. No, it doesn't.
- 10 Q. And if you could turn to Opposer's
- 11 Exhibit 28, I believe, the '160 patent.
- 12 A. I have that one.
- 13 (Witness complies.)
- 14 A. Okay. I have it.
- 15 Q. What does the invention of the Japanese
- '160 utility model application relate to?
- 17 MR. HERRING: Objection.
- 18 A. This is relating to a cooling portion
- of the engine on the lower side that's actually
- 20 providing cooling to the oil and other
- 21 components. So there's a little indentation on
- 22 the cylinder with a couple of fins. It talks
- 23 about additional cooling.
- Q. Is the cooling element described in the
- 25 '160 application an internal or an external

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- 1 engine component?
- MR. HERRING: Objection.
- 3 A. They're describing external components.
- Q. What, if any, impact does the cooling
- 5 device described in the '160 application have on
- 6 the external appearance of the fan cover?
- 7 A. It may have a -- on the lower portion,
- 8 additional material that's added to the fan
- 9 cover, but, in general, it doesn't change the
- 10 overall appearance of the fan cover.
- 11 Q. Does the '160 application describe or
- 12 claim any of the elements you identified earlier
- as contributing to the overall cubic appearance
- 14 of the GX engine in Honda's trademark
- 15 application?
- MR. HERRING: Objection.
- 17 A. No, it doesn't.
- 18 Q. In your opinion, does the '160
- 19 application show that the appearance of the GX
- 20 engine in Honda's trademark application is
- 21 functional?
- A. No, it doesn't.
- MS. FRAZIER: Could we mark that,
- 24 please, with Applicant's next one.
- 25 (Photograph Bates-stamped

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- 1 AHGX000868 marked Applicant's Exhibit 52.)
- 2 BY MS. FRAZIER:
- Q. Mr. Mieritz, you've been handed what's
- 4 been marked as Applicant's 52. Do you recognize
- 5 this?
- 6 A. It's a Honda GX horizontal shaft
- 7 engine. Yes.
- Q. What shape is the bottom of the fan
- 9 cover on this engine?
- 10 A. The fan cover -- the bottom of this fan
- 11 cover has a vertical appearance to it -- excuse
- me, a horizontal appearance to it.
- Q. Does this engine have the overall cubic
- 14 design shown in Honda's trademark application?
- 15 A. Yes, it does.
- 16 Q. In your opinion, could OEMs and other
- 17 consumers identify this engine as a Honda GX,
- 18 based on its appearance?
- 19 MR. HERRING: Objection.
- 20 A. In my opinion, yes, they could.
- 21 Q. During your cross-examination, counsel
- 22 asked you about some of your deposition testimony
- 23 regarding the updated GX engine. Do you have
- 24 your deposition in front of you?
- 25 A. Yes.

[Page 248] 1 Q. If you could turn to Page 89, please. 2 (Witness complies.) 3 Okay. Α. Q. Counsel asked you, starting at Line 7 of Page 89: 5 6 "QUESTION: Does eliminating the ribbing 7 from the carburetor cover change the overall 8 appearance of the GX engine?" 9 And you testified: 10 "ANSWER: No." 11 Correct? Yes, I did. 12 Α. 13 MR. HERRING: Objection. 14 Q. He then asked: 15 "QUESTION: Why not?" 16 And you testified: 17 "ANSWER: It still maintains the overall 18 cubic look, and the individual components give it 19 that cubic look. 20 "QUESTION: When you say it 'maintains the 21 overall cubic look,' you're talking about the 22 height and width about the same, right? Of the 23 front view? 24 "ANSWER: Yes. 25 "QUESTION: And the components being what,

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- squarish and rectangular?
- 2 "ANSWER: Complementary shapes to the cubic
- 3 look, yes."
- 4 Is it still your opinion that the
- 5 complementary shapes are what give the GX engine
- 6 its cubic look?
- 7 MR. NOWAKOWSKI: Objection.
- 8 Mischaracterized what he testified to, what you
- 9 just read.
- 10 A. Yes, I am. Yes, I do.
- 11 Q. And, in your opinion, did the Honda GX
- 12 engine maintain the overall cubic look after it
- was updated?
- 14 A. Yes, it did.
- 15 Q. Is that true with respect even for
- 16 the -- excuse me. Is that true with respect to
- 17 the ribbing that was removed?
- 18 A. Yes. That's true.
- 19 Q. Is it true with respect to the beveling
- 20 that was softened?
- 21 A. Yes.
- Q. Is it true with respect to the height
- 23 of the fuel tank?
- 24 A. Yes, it is.
- Q. Mr. Mieritz, you were also asked some

[Page 250]

- 1 questions about Mr. Hoag during your
- 2 cross-examination. Do you remember that?
- A. Yes, I do.
- 4 Q. In your opinion, is Professor Hoag an
- 5 expert in general-purpose engine design?
- A. In my opinion, he's not an expert in
- 7 general-purpose engine design. He's more of an
- 8 expert of internal combustion engine theory.
- 9 Q. Why is he not an expert in
- 10 general-purpose engine design --
- MR. NOWAKOWSKI: Object. Foundation.
- 12 Q. -- in your opinion?
- 13 A. I don't think that Professor Hoag has
- 14 designed components within an engine or on the
- 15 exterior surface of an engine.
- Q. Mr. Mieritz, are there applications
- 17 where either a front-mounted or top-mounted air
- 18 cleaner cover would work equally well?
- 19 A. I'm sure there are. Yes.
- Q. Are there applications where only a
- 21 panel-mounted air cleaner cover would work?
- 22 A. Yes.
- Q. In those applications where only a
- 24 panel-mounted air cleaner cover would work, the
- 25 GX engine design shown in Honda's application

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- would not be competitive. Correct?
- A. Correct. Unless they had an alternate
- 3 design.
- Q. If you could look, please, at
- 5 Exhibits -- Applicant's Exhibits 17 --
- A. Yes.
- 7 Q. -- and I believe it's 43 -- no, I'm
- 8 sorry, 44.
- 9 (Witness complies.)
- 10 Q. Who manufactures the engines shown in
- 11 Exhibits 17 and 44?
- 12 A. These are both Kohler engines.
- 13 Q. Based on your experience in the
- 14 industry, would you expect Kohler to have done
- 15 benchmark testing against the GX engines, similar
- 16 to what you did at Briggs?
- 17 A. Sure.
- 18 Q. To your knowledge, did Kohler provide
- 19 any data in this case showing any differences in
- 20 performance as a result of the appearance of
- 21 those engines?
- MR. HERRING: Objection. Vague.
- MR. NOWAKOWSKI: Objection.
- 24 Foundation. Go ahead.
- 25 A. No. I have not seen any data.

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- 1 Q. Would you expect Kohler to have that
- 2 sort of data?
- 3 A. Yes.
- 4 Q. Would you expect Kohler to have data
- 5 regarding the cost to manufacture the engines
- 6 shown in Exhibits -- Applicant's Exhibits 17 and
- 7 44?
- 8 A. Of course.
- 9 Q. And, to your knowledge, did Kohler
- 10 provide any data in this case regarding the costs
- 11 to manufacture the engines shown in Applicant's
- 12 Exhibits 17 or 44?
- A. Not to my knowledge. No.
- MS. FRAZIER: Thank you, Mr. Mieritz.
- No more questions.
- 16 MR. NOWAKOWSKI: I'm sorry. I have a
- 17 couple of additional questions.
- 18 RECROSS-EXAMINATION
- 19 BY MR. NOWAKOWSKI:
- Q. Take a look, Mr. Mieritz, at the '160
- 21 Japanese utility, which I believe is --
- 22 A. This last one we had.
- Q. That is exhibit -- Applicant's --
- excuse me, Opposer 28.
- 25 A. Okay.

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- Q. And, in particular, take a look at the
- 2 last paragraph of the page designated 0006532 and
- 3 the first paragraph of the next page. Can you
- 4 read that, please, not out loud. Just read it to
- 5 yourself.
- 6 (Witness complies.)
- 7 A. Did you say the first paragraph on the
- 8 next page?
- 9 Q. Yes.
- 10 A. Okay. Okay.
- 11 Q. Now, you've testified that this patent
- 12 relates to an internal device on the engine
- described and claimed in this patent that
- 14 increases the volume of air to the top parts of
- 15 the engine. Right?
- MS. FRAZIER: Objection.
- 17 Mischaracterizes testimony.
- 18 A. No. It doesn't increase the air. What
- 19 you're doing in Figure 3, the little indentation,
- 40, 41A and the fins in there, that's new to
- 21 engines. It's typically not there. So what
- they're doing is they're adding two fins on the
- 23 bottom, they're providing more clearance
- 24 underneath it, or some clearance so the cooling
- 25 air can get at those fins and actually cool.

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- 1 Q. Okay. And the reason for the invention
- is that the scroll-like bottom, rounded bottom of
- 3 the fan cover, which is used to facilitate the
- 4 flow of the air, is flattened by virtue of the
- 5 use of the inclined or tilted -- they call it
- 6 tilted cylinder. Isn't that right?
- 7 MS. FRAZIER: Objection.
- 8 A. Due to the diameter that they're using
- 9 in the radius of the scroll, it cannot impede the
- 10 mounting surface. That dimension from the center
- line of the crank to the mounting service is an
- 12 SAE standard.
- So if you would continue your scroll, you
- 14 would interfere with the apparatus. So what they
- 15 have done on this engine, and many other engines
- we talked about today, they flatten that bottom
- 17 portion.
- 18 Q. So the flattening of the bottom portion
- of that engine that's shown in Exhibit No. --
- what is it, 28 -- is a result of other aspects of
- 21 the engine, not styling of the engine. Correct?
- 22 A. Yes.
- Q. It's got nothing to do with styling of
- 24 the engine. Does it?
- A. Well, on this particular instance, if

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- 1 your fan was smaller in diameter, you wouldn't
- 2 have the same interference problem. But then you
- 3 would flatten that portion, like Honda has done,
- 4 for their appearance.
- 5 Q. Yeah. Do you know whether the fan in
- 6 the Honda engine is greater or less than the size
- 7 of the engine -- size of the fan in
- 8 Exhibit Applicant's 28?
- 9 A. No, I don't.
- 10 Q. I'm sorry. Opposer 28.
- 11 A. No, I don't.
- 12 Q. Did you ever ask anybody for Kohler
- 13 records regarding manufacturing costs?
- 14 A. No, I didn't.
- 15 Q. Did you ever make a search, personally
- 16 make a search for Kohler records --
- 17 A. No.
- 18 Q. -- regarding manufacturing costs or any
- 19 aspect of the manufacture of the Kohler engines?
- 20 A. No.
- MR. NOWAKOWSKI: I've got nothing more.
- 22 Do you have anything?
- MR. HERRING: One second.
- MS. FRAZIER: Are we done?
- MR. HERRING: One second, please.

	[Page 256]
1	(Discussion off the record.)
2	MR. NOWAKOWSKI: I'm sorry. I have a
3	couple more questions.
4	BY MR. NOWAKOWSKI:
5	Q. Mr. Mieritz, do you recall in your
6	redirect examination some questions regarding
7	whether the overall cubic design shown in
8	Applicant's Exhibit 6 is necessary to achieve
9	certain objectives, including reduced engine
10	height, good mountability, light weight, improved
11	performance, improved quality, and reduction of
12	costs? Do you remember those questions?
13	A. With respect to Honda's project
14	description?
15	Q. Yes. Whether the do you recall the
16	questions with regard to the Honda overall cubic
17	appearance in the Honda trademark, and whether
18	those were necessary to improve the objectives in
19	Exhibit 191-A, which included Confidential: Attorney's Eyes
20	Confidential: Attorney's Eyes Only
21	Confidential: Attorney's Eyes Only Do you remember those
22	questions?
23	A. Yes.
24	Q. And your answer was "no" to each of
25	those questions?

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- 1 MS. FRAZIER: Objection.
- A. My answer was "no" to which questions?
- Q. Do you recall that your answer was "no"
- 4 to each of those questions?
- 5 MS. FRAZIER: Objection.
- 6 A. Can you repeat the questions?
- Q. Well, let me ask it this way. I'll
- 8 withdraw that question.
- 9 Do you recall being asked questions that
- 10 related to the objectives in Exhibit 191-A in
- redirect examination regarding Confidential: Attorney's
- 12 Confidential: Attorney's Eyes Only
- Confidential: Attorney's Eyes Only
- 14 Confident Do you remember, generally, that
- 15 questions were asked of you about that?
- 16 A. Yes. We discussed that this morning.
- 17 Q. Okay. Do you also recall in redirect
- 18 that were you asked the question:
- 19 "QUESTION: Is the overall appearance of the
- 20 GX engine in Applicant's Exhibit 6 better to
- 21 achieve those goals" -- that I just talked
- 22 about -- "set forth in 191-A than the
- 23 alternatives you discussed earlier?"
- 24 Do you recall that question?
- A. I don't recall that question. It's

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- very confusing, but, in general, I think I do.
- Q. I guess my question -- follow-up
- question to that, to you, is whether you have
- 4 done any testing on any of the engines that you
- 5 were shown with regard to light weight,
- 6 mountability, reduced engine height, compactness,
- 7 improved performance, improved quality, or
- 8 reduction of cost regarding those engines, as
- 9 opposed to the engines shown in the trademark
- 10 Exhibit No. 6?
- 11 A. The only engine I would have done some
- of that work on was the Vanguard 9-horsepower
- engine that was shown in Exhibit 24.
- 14 Q. And that work would have been done no
- 15 earlier -- or no later than nine years ago, when
- 16 you left Briggs. Right?
- 17 A. That work was approximately done in the
- 18 mid '80s.
- 19 Q. Okay. So that work was done in the mid
- 20 '80s. I have nothing further.
- MR. NOWAKOWSKI: Are we done?
- MS. FRAZIER: We're done.
- 23 (Deposition concluded at 4:16 p.m.)

24

25

		[Page 259]
1		
2		
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4		
5		
6	JAMES MIERITZ	
7		
8		
9	Subscribed and sworn to before me	
10	this, day of, 2015	
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	[Page 260]
1	CERTIFICATE
2	COMMONWEALTH OF MASSACHUSETTS
3	SUFFOLK, SS.
4	I, Janet M. Sambataro, a Registered Merit
5	Reporter and a Notary Public within and for the
6	Commonwealth of Massachusetts do hereby certify:
7	THAT JAMES MIERITZ, the witness whose
8	testimony is hereinbefore set forth, was duly
9	sworn by me and that such testimony is a true and
10	accurate record of my stenotype notes taken in
11	the foregoing matter, to the best of my
12	knowledge, skill and ability.
13	I further certify that I am not related
14	to any parties to this action by blood or
15	marriage; and that I am in no way interested in
16	the outcome of this matter.
17	IN WITNESS WHEREOF, I have hereunto set
18	my hand this 6th day of September, 2015.
19	Sand M. Santaker
20	
	JANET M. SAMBATARO
21	Notary Public
22	
23	My Commission Expires:
24	July 16, 2021
25	

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WITNESS ERRATA SHEET

Case Name:

BRIGGS & STRATTON CORPORATION AND KOHLER COMPANY v. HONDA GIKEN KOGYO KABUSHIKI KAISHA

Deposition Date:		August 26, 2015
Deponent:		JAMES_MIERITZ
Page	Line	CORRECTION
11	11	change "show" to "shown"
12	22	change "end piston, end bore" to "and piston, and bore"
13	16	change "realign" to "rewind"
20	4	change "is somewhat looking straight on, vertical, the" to "is
		somewhat rectangular looking straight on, the"
23	19	change "angle" to "angled"
27	12	change "23" to "24"
29	6	change "theme to "seam"
42	17	change "blow" to "blower"
186	5	change "right-hand" to "left-hand"
204	7	change "as" to "adds"

JAMES MIERITZ

SUBSCRIBED AND SWORN BEFORE ME

change "cool" to "cooler"

Notary Public State of Florida Susan D Miller My Commission FF 220301 Expires 05/12/2019

(Notary Public)

MY COMMISSION EXPIRES:

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44 37:5,8,16,25 41:2 42:4 45:7,13,21 59:25 60:3 62:4 62:6 63:6 82:2 90:19 222:7 223:22 224:8.11 225:1.9 227:25 228:22 251:8,11

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46 67:9,12 232:11,18 261:16

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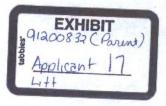
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AHGX0101295

EXHIBIT B

JAMES T. MIERITZ

4315 Collingtree Drive Rockledge, Fl. 32955 262-227-6447 Jmieritz@cfl.rr.com

Summary of Experience

Senior level professional with over 25 years of diversified experience in worldwide engineering and business operations management. Extensive background in manufacturing and quality systems, pricing, negotiations, new product development, program management, strategic planning, and design.

July 2006 to December

Cequent Trailer Products / Division of Trimas Corporation, Mosinee, Wisconsin

December 2008

<u>Senior Global Sourcing Manager/Engineering</u>: Responsible for offshore component sourcing and engineering.

1970 to 2006

Briggs & Stratton Corporation, Milwaukee, Wisconsin A \$2.5 billion, Fortune 500 manufacturer of engines and powered systems with production facilities in the US, Japan, Europe, and China.

1998 to 2006

<u>Business Manager for Asian Operations</u>: Responsible to Divisional Vice President of Asian Operations for business management of joint venture facility in Japan (DBS Co LTD) and contract engine purchases from Mitsubishi Heavy Industries, engine transfer pricing, production scheduling, inventory, program management, forecasting, budgeting, engineering, and department supervision. Member Board of Directors of DBS Co LTD.

- Directed and managed DBS Co LTD. Member of the Board of Directors 1992-2004. Result: Achieved between \$1,750,000 - \$25,000,000 annual operating profits with an average annual dividend of \$2,000,000.
- Recommended and proposed BIG BLOCK engine series concept. Result:
 Created new engine line with first year sales of 5,000 engines and a 5 year growth plan of 400% generating \$2,500,000 operating profit.
- Negotiated engine transfer prices from Daihatsu/Briggs & Stratton (DBS) yearly.
 Result: Insured a 60-40% balance of operating profits for partners.
- Negotiated DBS engine discounts. Result: Established special customer prices for 30,000 consumer brand engines.
- Achieved an additional 7% DBS discount for Simplicity. Result: Maintained the business of 20,000 engines with sales of \$8,000,000.
- Maintained minimum daily build rates. Result: Generated operating profits of \$1,750,000 in 2005 and achieved positive operating profits for the past 15 years.
- Directed business with Mitsubishi Heavy Industries for engine orders, pricing, production schedules, and forecasting. Result: Negotiated 70,000 additional storm stock engines at up to \$30 below standard cost. 2005 engine totals were

EXHIBIT 91200832 (Parent) Applicant 4 | Mieritz 8/26/2015 170,000 which generated \$40,000,000 in sales.

- Structured engine discounts from Mitsubishi Heavy Industries. Result: Sold 90,000 engines that produced \$24,500,000 in sales.
- Finalized contract to purchase engines from Mitsubishi Heavy Industries. Result: Renewed contract for an additional 5 years which produced \$30,000,000 in annual sales and 100,000 engines per year.
- Launched a 5hp engine to China. Result: Completed a 2 year program to manufacture an engine with 80% of the components localized in China at the proposed target cost.
- Completed M12 marine engine. Result: Added \$3,300,000 annual sales for the Chinese engine manufacturing plant.
- Developed a liquid-cooled V-twin engine. Result: Obtained 6 new commercial accounts with first year sales of \$3,000,000.
- Obtained special prices for 5 customers SKU's. Result: Generated 30,000 new additional engines for \$6,000,000 in sales.
- Eliminated premium freight of engines shipped from Japan. Result: Generated \$750,000 annual savings.
- Transferred parts packaging from external to internal. Result: Achieved \$500,000 annual savings.
- Developed executive personnel. Result: Promoted the following: program manager to product manager, program manager to manufacturing development manager, technician to program manager, technician to application engineer and engineer to engineer specialist.

1988 to 1998

Engineering Manager Vanguard Engines: Responsible to Vice President/General Manager Vanguard Division for engineering management of premium brand of engines from 4-25hp. Managed an engineering staff for design and development, budgets, cost, new products, program management, long range planning and engineering documentation.

- Designed and developed a new 9hp engine. Result: Expanded the engine series into the commercial market which provided 50,000 additional engines per year.
- Established a cost reduction program to maintain profitability @ 90 Yen/\$.
 Result: Manufactured over 1,500,000 engines in 15 years which provided \$40,000,000 annual sales.
- Increased engine hp for additional V-twin models. Result: Generated \$20,000,000 in annual sales.
- Expanded single cylinder engine line. Result: Added 4 engines that increased annual sales by \$10,000,000.
- Promoted to Business Manager for Asian Operations.

1964 to 1988

Held positions of increasing responsibility: Manager of Engineering/Industrial-Commercial Engines, Assistant Chief Design Engineer/Large Engines, Assistant Chief Design Engineer, Project Engineer and Tool Design/Specifications Writer/Draftsman.

Promoted to Engineering Manager Vanguard Engines.

MBA Degree, Keller Graduate School, Milwaukee, Wisconsin BSME Degree, Marquette University, Milwaukee, Wisconsin **Education:**

Society of Automotive Engineers (SAE) Past Chairman Small Engine Committee **Professional** Affiliations:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

Honda Giken Kogyo Kabushiki Kaisha (Honda Motor Co., Ltd.)

2-1-1 Minami-Aoyama

Minato-Ku Tokyo 107 Japan

Serial No.:

78 924545

Examining Attorney: J. Rauen

Filed:

July 7, 2006

Law Office: 109

For:

MISCELLANEOUS DESIGN

Class: 7

Commissioner for Trademarks BOX RESPONSE NO FEE P.O. Box 1451 Alexandria, Virginia 22313-1451

DECLARATION OF JAMES MIERITZ

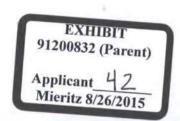
I. INTRODUCTION

I have been retained by American Honda Motor Co. ("American Honda") to
provide expert testimony regarding among other things, the unique, distinctive appearance of the
engine shown in Exhibit A that is the subject of the above-identified application.

II. OUALIFICATIONS

2. I have over thirty-five years of experience working in the gasoline engine industry. From 1970 to 2006, I worked for Briggs & Stratton, one of the largest manufacturers of small gasoline engines in the world and a competitor of Honda in this market. I began my career at Briggs & Stratton as an engineer and draftsman for gasoline engines. Over the years, I achieved increasing levels of responsibility, becoming an Assistant Chief Engineer and Engineering Manager for various classes of engines. In these roles, I designed, participated in, and supervised teams of engineers responsible for small gasoline engine design.

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- 3. For example, I was the project engineer/design engineer for the first Briggs & Stratton twin-cylinder opposed engine from 1974-1977. During that project, my responsibilities included designing the entire engine layout. As project engineer, I had complete design responsibility for every component in the engine. I also put together the team that took the engine from concept to production.
- 4. During my career, I had experience with the engine that is the subject of the present application (referred to hereinafter as the "GX Engine") as well as other similar types of engines. In 1985-1986, Briggs & Stratton began looking at engines to compete with Honda. I was leader of the design team for a 9 hp OHV single cylinder horizontal shaft, inclined cylinder engine that was Briggs & Stratton's first attempt to compete with Honda.
- 5. In addition, in 1986-1987, I began working on the Vanguard engine series, a line of engines from 5 hp up to 30 hp which was in direct competition with the Honda GX series and other industrial type engines. From approximately 1988 to 1998, I was the Engineering Manager-Vanguard Engines. I oversaw the engineering and design group that designed and developed the Vanguard engines.
- 6. As an engineer and manager, I was required to have an understanding of our competitors' products and the relative strength and weaknesses of those products as compared to those of Briggs & Stratton. At Briggs & Stratton, we brought in competitors' engines, tore them down and benchmark tested them. We tested Honda GX engines, Kohler engines, and Kawasaki engines, among others. In addition, as a manager, I became intimately familiar with the cost considerations of engine design.
- Beginning in 1998, I moved into a business management role, becoming the
 Business Manager for Asian Operations. In this capacity, I was responsible for business

management of a joint venture facility in Japan and contract engine purchases from a Japanese supplier, engine transfer pricing, production scheduling, inventory, program management, forecasting, budgeting, engineering, and department supervision.

- 8. I retired from Briggs & Stratton in 2006.
- I obtained a Bachelor of Science in Mechanical Engineering from Marquette
 University, also in Milwaukee, Wisconsin in 1970. I obtained a Masters of Business
 Administration from the Keller Graduate School in Milwaukee, Wisconsin in 1996.
- 10. I am a member of the Society of Automotive Engineers (SAE). I am also a Past Chairman of the Small Engine Committee of the SAE. My complete resume is attached to this report as Exhibit B.

III. SUMMARY OF OPINION

11. It is my opinion that the engine configuration that is the subject of the present application has a unique and distinctive overall appearance, which is comprised of several individual design features that are themselves unique and distinctive. Based on my education and experience, it is my opinion that these individual design features, as set forth in detail below, do not contribute to the functionality of the GX Engine. Instead, these features are matters of styling and taste.

IV. DATA AND MATERIALS CONSIDERED

12. I have been informed that a trademark that is a three-dimensional configuration of a product is functional if the configuration is essential to the use or purpose of the product, or if the feature affects the product cost or quality. I have been informed that to meet the test of legal functionality a product must be in a particular shape because it works better in that shape or costs less in that shape.

- 13. I have been informed that when determining the functionality of a trademark that consists of a three-dimensional configuration of goods, one must focus on the overall visual impression that the combination and arrangement of those elements create. I have been informed that functional elements that are separately unprotectable can be protected together as part of a trademark that also includes non-functional elements.
- 14. I have been informed that some considerations used to determine functionality are
 (1) whether advertising touts the utilitarian advantages of the design, (2) whether the particular
 design results from a comparatively simple or inexpensive method of manufacture, (3) whether
 the design yields a utilitarian advantage and (4) whether alternative designs are available. With
 respect to alternative designs, I have also been informed that the availability of alternative
 designs may indicate whether the feature embodies functional or merely ornamental aspects of
 the product.
- 15. I have been informed that the term "acquired distinctiveness" (also called "secondary meaning") refers to the association of a product's configuration with the source or manufacturer of that product. I have been informed that it is this association of a product's configuration with the product's source that trademark law protects.
- 16. I have been informed that courts look at multiple factors to determine whether a trademark has acquired distinctiveness. I have been informed that copying of a design may be evidence of acquired distinctiveness.

V. THE PROCESS OF SMALL ENGINE DESIGN

17. As background for my opinions, I set out below a brief summary of one approach to engine design. While this is not the only way to design an engine, it is illustrative of the types of decisions that need to be made to arrive at a working production grade engine.

A. INITIAL DESIGN AND LAYOUT

- 18. The first step is to determine the required displacement in cubic inches ("in³") of the engine you want to design. The logical place to begin is with a target power output in horsepower ("hp") and an established horsepower per cubic inch ("hp/in³").
- 19. The target power output will probably be dictated by customer demand or market convention. For instance, a 5.5 hp engine is a common power rating in the small utility-type engine market. The hp/in³ may be based on what the company or an engineering team has achieved in the past, or it may be based on what a competitor has achieved, or it may simply be based on an engineering goal. For small utility-type engines, such as a GX Engine that is the subject of the present application, a good basis to start is 0.5 hp/in³.
- 20. Given the target power rating of the engine and the horsepower per cubic inch decided upon, the displacement in cubic inches of the engine can be determined by simple calculation:

Target Horsepower ÷ Horsepower/Inch³ = Inch³ 5.5 hp ÷ .5 hp/in³ = 11 in³ (displacement)

21. Displacement is the measure of volume that a piston moves through within the cylinder of an engine. As a practical matter, displacement is determined by the Bore area (the area of the piston head) x Stroke (the one-way distance traveled by the piston head within the cylinder). Having determined a desired displacement, we can readily calculate various combinations of Bore x Stroke to achieve the desired displacement.

Bore (in)	Bore area (in²)	Stroke (in)	Displacement (in ³)
1.5	1.77	6.22	11
2.0	3.14	3.50	

3.0	7.07	1.56	1
5.0			

- 22. As shown in the table above, there can be many combinations, e.g., large bore x small stroke or small bore x large stroke. Each combination has its trade-offs with respect to emissions, overall engine size and combustion efficiency.
- 23. After the Bore x Stroke is selected, the position of the cylinder bore (vertical, inclined or horizontal) is determined. Again, there are many choices, but this is usually dictated by overall size requirement. All other things being equal, for a given Bore x Stroke measurement, a horizontal cylinder will result in a low, wide engine; a vertical cylinder will result in a tall, narrow engine; and an inclined cylinder will result in something in between depending on the angle.
- 24. Once the Bore x Stroke and cylinder bore position is established, we can begin the process of determining the basic internal engine layout of the crankshaft, cam gear, piston and connecting rod, and cap. Beginning with the crankshaft and connecting rod, we generate a 360° degree path of the connecting rod and cap to determine inside cylinder clearance paths.
- 25. With these paths established, the gear centers, a critical design feature, can now be established for the timing gear (crankshaft) and the cam gear. The relative location of the gear centers is critical. When you are designing an engine, you want to keep it as small as possible. The tolerances between the gear centers (and by extension the moving parts turned by the crankshaft and cam shaft) is therefore very small.
- 26. The cam gear in turn operates through various other components called the valve train to allow the flow of air, fuel, and combustion gases into and out of the cylinder. These components include tappets, push rods, rocker arms, valves, etc. The valve train is

designed together with the cylinder head, the portion of cylinder through which air, fuel, and combustion gases flow. Variations in the location of the gear centers change the design geometry of the entire valve train.

- Next, additional gearing, such as governor gears, oil pumps, etc., is designed.
- 28. Only after these aspects of the internal design have been determined, it is possible to determine the shape of the crankcase cover, including required bolt spacing, gasket shape, and perimeter of the cover. Cylinder fins, walls, legs and other shapes are usually now determined. Once these steps have been completed, a "Basic Engine Powerplant" has been established, which includes cylinder head, piston, connecting rod and cap, crankshaft, cam gear, valve train and miscellaneous gearing. This is an enclosed package with the cover mounting to the cylinder and the cylinder head attached to the cylinder.
- 29. At this point in the process, one can begin adding the "outside" components of the engine. It is typical to start with the flywheel, fan and ignition systems.
- 30. Fan size ultimately determines cooling rate of the engine. The larger the fan, the better, but noise must also be considered. Maximum fan diameter is established by the centerline of crankshaft to the mounting legs of the cylinder. This dimension is usually equal among competitors. The cooling air must be directed to the 'hot spots' of the cylinder and cylinder head. There needs to be some means of directing the air upward (either through an internal scroll or with the fan cover itself or with some combination), but many different fan cover configurations would accomplish this. The particular shape chosen is cosmetic.
- 31. A rewind or recoil starter, rotating screen, and fan enclosure are created. The amount of 'open area' in the recoil cover determines the amount of air drawn into the engine.
 Any number of variations in the shape of the recoil cover, such as holes, slots, square, rectangles

or other openings, can provide the open area required for effective cooling. Again, the appearance of these features is mostly cosmetic.

- 32. The next steps might be to add the carburetor and air cleaner. The carburetor can be directly mounted to the cylinder head or mounted with an elbow. The air cleaner may also be mounted in several locations. It could be on the top, side, or front of the engine, subject to the limitations of package size. Again, the particular shape and appearance of the air cleaner cover and carburetor cover are usually determined by customer demand and styling.
- 33. The remainder of the outside components can now be determined. These typically include a muffler, fuel tank, engine governing levers and other controls. Accessories, such as an off-on switch, choke and speed levers, and safety guards, plus customer add-ons, are the last items fitted.

B. PROTOTYPE FABRICATION AND TESTING

- 34. Once the parts have been designed and detailed to ensure the tolerances are functional, the designs are transferred to a model shop where one or two engines are fabricated from scratch.
- 35. The model engine is then tested in a variety of ways. The engine is coupled to a dynamometer in a test cell. A variety of thermocouples are attached to the engine to determine the temperature at a number of critical positions on the model. Initially, basic mechanical functioning is tested at low speed to confirm, for example, that oiling within the crankcase is satisfactory. Eventually, the engine is brought up to rated full load at rated speed where all the thermal conditions are at their worst. The engine's power output, torque, and temperature are continuously monitored.
- 36. Many aspects of engine performance must be tested by trial and error. For example, if the horsepower falls short of expected, the design team might need to change valve

size, valve lift, carburetor size, ctc. The same sort of trial and error process applies to other aspects of engine performance including, for example, oiling, cooling, and fuel flow. Testing of multiple prototypes may be required.

37. After achieving the rated speed and horsepower with acceptable temperatures and good oiling of the engine components, a life test is run at full load and maximum rated speed.
Such a test enables you to determine the durability of crankshaft, connecting rods, cylinder, etc.
At Briggs & Stratton, we ran life tests for 1000 to 1500 hours, depending on the type of engine tested. For the premium brand Vanguard line of engine that competed directly with the Honda
GX Engines we tested engines for 1500 hours.

C. EXTERIOR DESIGN FEATURES

- 38. Styling of the engine can usually begin after the engine layout is complete and prototype fabrication has started.
- 39. Often companies will employ or contract with an Industrial Designer to develop a packaged appearance that will be appealing, distinguish the finished engine from other competitive products, and associate it with other product offerings from the same manufacturer.
- 40. An Industrial Designer is asked to visualize concepts. The stylist will take into account requests from Sales, Marketing and other departments to provide various sketches. A variety of various concepts are reviewed. At such time appearances such as beveled edges, radii edges, sharp corners or other shapes and contours are considered. Additional items such as covers, shrouds, control placement and customer convenience items can be styled-in at this time. The look of an engine takes into account features such as decorative covers and their shapes, colors, intake air openings (slots, holes, etc.) and the blending of all lines.
- 41. Industrial Designers have to work closely with the engineers to insure that the styling concepts do not affect the performance of the engine. The styling should be purely

cosmetic. Materials might also play an important role in styling. The manufacturability and assembly ease must also be considered.

42. Many revisions of the styling concepts may be necessary before the final appearance is complete. After approval, an engine "mock-up" is fabricated which is used to show management and customers the prototype engine.

D. SUMMARY

43. To summarize, the steps generally required to design the "inside" of the engine are:

Establish cubic inch displacement

Establish Bore x Stroke

Determine gear centers

Determine valve train

Finish cylinder finning, cylinder head design and crankcase cover

44. Once these steps have been completed, one can add "outside" components, such

as:

Flywheel and fan

Ignition system

Blower housing and rewind starter

Carburetor

Air cleaner

Fuel tank

Governing and controls

Muffler

Accessories

45. Finally, the entire engine appearance is stylized in order to achieve a brand identity.

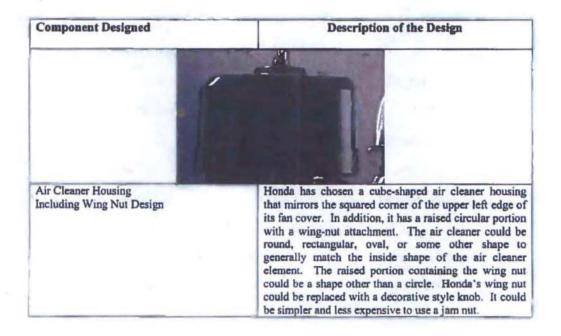
VI. RELEVANT EXPERIENCE WITH THE HONDA GX ENGINE

- 46. I first became aware of and familiar with the Honda GX Engine approximately 20 years ago, while working at Briggs & Stratton.
- 47. As discussed above with respect to my qualifications, at Briggs & Stratton, I was engineering manager for the Vanguard line of engines that competed with Honda and Kohler in the high-quality, high-end portion of the small-utility engine market. We were constantly trying to improve our engines to match the performance and durability of the Honda GX Engine.
- 48. As someone who has worked in the small gasoline engine industry for the past 35 years, and specifically in the years since the Honda GX Engine reached the market, and based on my specific experience designing engines to compete with the Honda GX engine, it is my opinion that the Honda GX Engine is famous, due to, among other things, its startability, dependability, reliability, and innovation.
- 49. In addition, the look of the GX Engine is well-known throughout the industry.
 Based on my experience dealing with original equipment manufacturers, distributors, dealers,
 and other potential customers for such engines, I believe that a large number of such individuals
 would immediately recognize the look of the GX Engine and associate it with Honda.

VII. THE DISTINCTIVE FEATURES OF THE HONDA GX ENGINE ARE NONFUNCTIONAL

50. The Honda GX Engine has a distinctive overall look that comes from the combination of various design elements. Based on my experience designing engines of this type, I expect that the Honda engine was consciously styled to have its distinct appearance.

- 51. In my opinion, the design features of the GX Engine are matters of styling, not matters of functionality. The GX Engine does not work better or cost less because of these design elements, either when considered individually or as whole.
- 52. In the table below (beginning on the next page), I discuss some of the notable design features found on the GX Engine. I do not attempt an exhaustive catalog of all the unique features of the three dimensional configuration of the GX Engine. Instead, I explain from the standpoint of a design engineer why and to what degree to the particular design features of a Honda GX Engine are not functional.





Carburetor Cover & Shape, Plastic Ribs, Label & Control Placement & Orientation

Honda has chosen a stylized carburetor cover that also houses various engine controls. The appearance of the carburetor cover is purely cosmetic. It is not necessary for function, only styling. For example, the presence of the ribbing, including the number of ribs, is completely arbitrary. The presence and location of the bolts are also arbitrary. The fact that the carburetor cover extends the line of the air cleaner housing, but with a slight angular deflection, is also arbitrary.



Fuel Tank Shape, Size, Orientation, & Mounting

Honda has chosen a fuel tank with a shape that mirrors the angles on the air cleaner housing and the radii on the upper left corner of its fan cover. The bottom corners of the fuel tank also repeat this shape. The fuel tank could also be rectangular, trapez idal, or other unique shapes. Tank edges could be beveled, larger or smaller radii, sharp or a stepped contour. In particular, the angle of the upper left corner edge of the fuel tank (viewed from the side of the tank shown in Exhibit A) need not repeat the same corner of the air cleaner housing. Similarly, the upper right edge corner of the fuel tank angles outward, repeating the angled shape of the lower left portion of the fan cover. While the fuel tank size in part determines capacity, the exact dimensions may vary and still provide the required

capacity.

Honda has chosen to mount its engine using ears protruding from the crankcase mold. The shape of the tank will impact whatever mounting system you choose. The Honda mounts are designed to mate securely with the shape of the Honda fuel tank and are thus part of the overall design strategy. In general, the mounting of the fuel tank could be with brackets attached to the tank or the tank directly mounted to the engine cylinder.

In the generator configuration of the Honda GX Engine, the fuel mounts on the GX Engine are readily apparent, but not necessary.



Relative Position and Orientation of Each of the Major Honda GX Engine Components Honda has chosen components with particular dimensions that in turn affect the relative position and orientation of the components. The combination of spacing between the components, the shapes of the components, and the way the shapes of the components are oriented toward each other helps the styling avoid a cluttered or bulky look.

53. As set forth above, many of the individual features of the three dimensional configuration of the GX Engine complement each other and are purposely done for styling. The details of each design, including, for instance, the beveling of the air cleaner edges, the upper right corner of the fuel tank (as shown in Exhibit A), and the round edges on the fuel tank are indicative of a consciously stylized appearance. More importantly, the most noticeable components on the engine — air cleaner cover, and gasoline tank — all have the stylized features that do not affect engine performance. Instead, these details of design are merely cosmetic

styling. This styling does not necessarily increase or decrease the component cost. Furthermore, the quality (as in the durability) of the engine is not affected by the styling features discussed above

The undersigned being hereby warned that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001, and that such willful false statements may jeopardize the validity of the application or any resulting registration, declares that he/she is properly authorized to execute this Declaration and that the facts set forth in this application are true; all statements made of his/her own knowledge are true and all statements made on information and belief are believed to be true.

Dated: 2/27/89

James Mieritz

EXHIBIT A

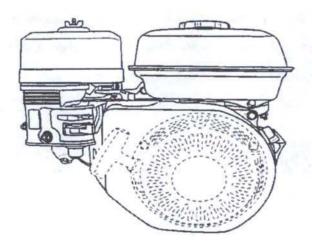


EXHIBIT B

Resume

14060 Solitaire Court New Berlin, Wisconsin 53151 262-227-6447 Jmieritz2@wi.n.com

Summary of Experience

Senior level professional with over 20 years of diversified experience in worldwide engineering and business operations management. Extensive background in manufacturing and quality systems, pricing, negotiations, new product development, program management, strategic planning, and design.

July 2006 to December 2008

Cequent Trailer Products / Division of Trimas Corporation, Mosinee, Wisconsin

Senior Global Sourcing Manager/Engineering: Responsible for offshore component sourcing and engineering.

1970 to 2006

Briggs & Stratton Corporation, Milwaukee, Wisconsin
A \$2.5 billion, Fortune 500 manufacturer of engines and powered systems with
production facilities in the US, Japan, Europe, and China

1998 to 2006 Business Manager for Asian Operations: Responsible to Divisional Vice President of Asian Operations for business management of joint venture facility in Japan (DBS Co LTD) and contract engine purchases from Mitsubishi Heavy Industries, engine transfer pricing, production scheduling, inventory, program management, forecasting, budgeting, engineering, and department supervision. Member Board of Directors of DBS Co LTD.

- Directed and managed DBS Co LTD. Member of the Board of Directors 1992-2004. Result: Achieved between \$1,750,000 - \$25,000,000 annual operating profits with an average annual dividend of \$2,000,000.
- Recommended and proposed BIG BLOCK engine series concept. Result: Created new engine line with first year sales of 5,000 engines and a 5 year growth plan of 400% generating \$2 500,000 operating profit.
- Negotiated engine transfer prices from Daihatsu/Briggs & Stratton (DBS) yearly.
 Result: Insured a 60-40% balance of operating profits for partners.
- Negotiated DBS engine discounts. Result: Established special customer prices for 30,000 consumer brand engines.
- Achieved an additional 7% DBS discount for Simplicity. Result: Maintained the business of 20,000 engines with sales of \$8,000,000.
- Maintained minimum daily build rates. Result: Generated operating profits of \$1,750,000 in 2005 and achieved positive operating profits for the past 15 years.
- Directed business with Mitsubishi Heavy Industries for engine orders, pricing, production schedules, and forecasting. Result: Negotiated 70,000 additional storm stock engines at up to \$30 below standard cost. 2005 engine totals were 170,000 which generated \$40,000,000 in sales.
- Structured engine discounts from Mitsubishi Heavy Industries Result: Sold 90,000 engines that produced \$24,500,000 in sales
- Finalized contract to purchase engines from Mitsubishi Heavy Industries. Result:
 Renewed contract for an additional 5 years which produced \$30,000,000 in

annual sales and 100,000 engines per year.

- Launched a 5hp engine to China. Result: Completed a 2 year program to manufacture an engine with 80% of the components localized in China at the proposed target cost.
- Completed M12 marine engine. Result: Added \$3,300,000 annual sales for the Chinese engine manufacturing plant.
- Developed a liquid-cooled V-twin engine. Result: Obtained 6 new commercial accounts with first year sales of \$3 000,000.
- Obtained special prices for 5 customers SKU's Result: Generated 30,000 new additional engines for \$6,000,000 in sales.
- Eliminated premium freight of engines shipped from Japan. Result: Generated \$750,000 annual savings.
- Transferred parts packaging from external to internal. Result: Achieved \$500,000 annual savings.
- Developed executive personnel. Result: Promoted the following: program manager to product manager, program manager to manufacturing development manager, technician to program manager, technician to application engineer and engineer to engineer specialist.

1988 to 1998 Engineering Manager Vanguard Engines: Responsible to Vice President/General Manager Vanguard Division for engineering management of premium brand of engines from 4-25hp. Managed an engineering staff for design and development, budgets, cost, new products, program management, long range planning and engineering documentation.

- Designed and developed a new 9hp engine. Result: Expanded the engine series into the commercial market which provided 50,000 additional engines per year
- Established a cost reduction program to maintain profitability @ 90 Yen/\$
 Result: Manufactured over 1,500,000 engines in 15 years which provided
 \$40,000,000 annual sales.
- Increased engine hp for additional V-twin models Result: Generated \$20,000,000 in annual sales.
- Expanded single cylinder engine line. Result: Added 4 engines that increased annual sales by \$10,000,000
- Promoted to Business Manager for Asian Operations.

Held positions of increasing responsibility: Manager of Engineering/Industrial-Commercial Engines, Assistant Chief Design Engineer/Large Engines, Assistant Chief Design Engineer, Project Engineer and Tool Design/Specifications Writer/Draftsman.

Promoted to Engineering Manager Vanguard Engines.

1964 to 1988 Resume of JAMES T. MIERITZ Page 3

Education:

MBA Degree, Keller Graduate School, Milwaukee, Wisconsin BSME Degree, Marquette University, Milwaukee, Wisconsin

Professional Affiliations: Society of Automotive Engineers (SAE) Past Chairman Small Engine Committee

Exhibit D

Comparison of Competing Engines



Exhibit E

Honda GX Engine Brochure

USIDOCS 7077335v1

Honda GX Series Engines

GX160 HOND

HONDA

AHPB 001439

Honda GX Series Engines



HONDA

AHPB 001439

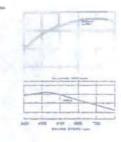
Horizontal Shaft

GXH50

A 2.5HP horizontal shaft 4-stroke OHV engine provides an excellent power source for generators, pumps, tillers and small construction equipment.





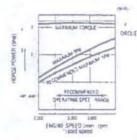


GX100

4.3.0HP horizontal shaft lightweight, OHI engine Includes mechanical guerrum and electroniignuton. Perfect for edgepunius and cowrete finishing equipment







GX120

V-HIP OHV haramtal shaft lightweight engine. Includes Automatu Decompression and Od Alem* for edgers, pumps, small construction equipment and reel-type linen moners.





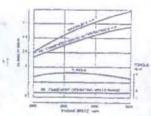


GX160

A 5.5HP OHV horizonalshaft engine with electronaignition and Oil Aler? L sage includes powering air compressors, generators, pamps, pressure washers, wel-type lawn mowers, coment trougle and constructum equipment







GX SERIES

The GX Series Engines have reliability written all over them.

Fonda GX Series Engines have long been recognized as the industry leader in providing rehable, easy-starting and fuel efficient small engines. You'll find Honda GX Series overhead valve engines on a wide variety of construction. maintenance and premium power equipment. The rental industry, where power equipment is subjected to the ultimate test of durability, relies heavily on Honda OHV engines to ensure customer satisfaction and a minimal level of maintenance and repair. When it comes to reliability, trust the engines with the Honda name.



Quality and performance are standard with Honda GX Series engines.

From east iron extinder sleeves to Automatic Decompression. Hordaoffers a variety of power solutions to meet your specific application. Choose from over (i) standard engine variations in the 2.5 to 13 bursepower range. A variety of features are available, depending on the specific model? and application, including four types of air filtration systems and Oil Alert, which warms the user before of reaches in unsafe operating level. Other options include 2-to-1 and 6-to-1 reduction units one to 18 unip charging, lamp cods and shaft variations to suit every standard application. For the most current information on Horda engine technologies, sist our website at www.hunda.com.

Environmental responsibility has been an integral part of our product development philosophy years before emission levels were established in fact, with minor modifications, the same GX Series engine design introduced in 1983 meets today's EPA and CARB emission level standards. Honda's advanced engine behinding offers a number of distinct advantages including fuel savings, lower emissions and standardized replacement parts readily available through your local Honda Engines dealer.

Prove it to yourself.

Next time you visit a rental center, see a landscape truck or pass by a construction site, you'll probably see a Honda GX engine-powered piece of equipment. Stop and ask them what they think of the Honda engine. Chances are they'll tell you they wouldn't use anything else. Sure, you can find a less expensive engine, but you won't find a more reliable one.

"See you should be here for details on one or consumer and architely grown

5 x 4 4 4 1 E B

Horizontal Shaft cont.

GX200

A 6.5HP OHV harizontalduff engine with electronic ignition and Oil Alert. It has the same carriers of uses as the GV100, with the addition of one more horsepower for more regionals applications.



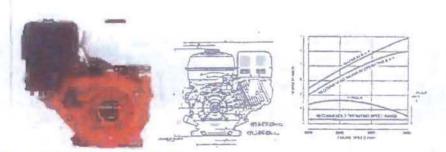
GX240

An BHP OHN horizonal shaft engine with electronic significant and Oil Alert. Its uses include powering compressors and unter compressors and unter pumps as well as many when construction applications.



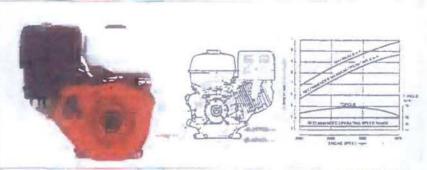
GX270

A 9HP OHY horizontalshaft engine with electronic ignition and Od Alers. It has the same rariety of uses as the GA240, With one more horsepower, this engine can make difficust jobs seem exist.



GX340

An LHIP OHA horamulashaft engine with 25° tilted exlinder. Oil Alert*, electronic ignition, available with carsing shaft and reduction ratios. It's used for laten movers, pressure tooshers and a correry of construction equipment.

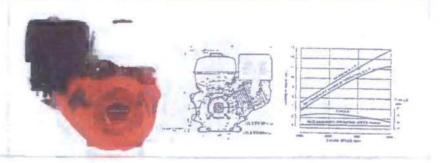


GX SERIES

Horizontal Shaft cont.

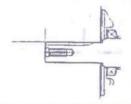
GX390

A ISHP OHV horizontal shaft engine with matematic decompression for our starting. The 13HP is the largest workhorse in our line of industrial engines.



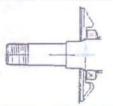
PTO Shaft Variations

HORIZONTAL

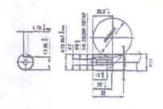




See cach model for aperglavitions.

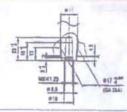


P. TYPE AND FTYPE THREADED CRAIGSHAFT for Market for questifications.



Q-TYPE FOR CHESO

VERTICAL



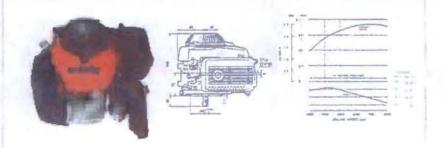
Y-TYPE FOR DICKS

AHPB 001443

Vertical Shaft

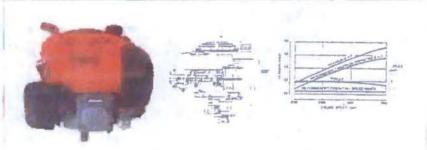
GXV50

A 2.5HP vertical shaft 4-stroke OHV engine offering a raggest reliable mouve of power for a rariety of small industrial and construction equipment.



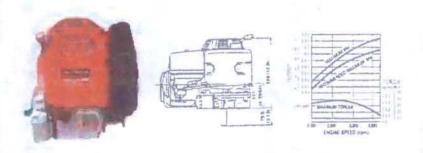
GXV160

A 5.5HP OHE cervialdual engine with electronic ignition and dual element air cleaners. Uses include commercial lawn movers and a currency industrial products



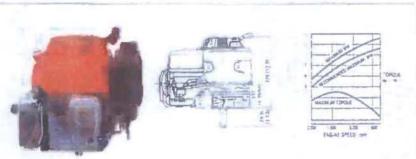
GXV340

An ITHI OH vertical shaft engine with easy manuferance features. Oil Mert*and electronic ignation, Used for powering turf equipment and floor buffers.



GXV390

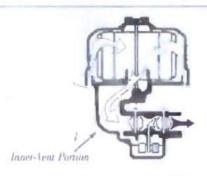
A 13HP OHY verticalshaft engine with features like Oil Alen* and electristart capabilities. Designed with commercial laten & garden and floor cure equipment in mind.



Air Filtration Systems

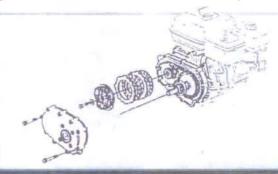
Honda offers a suriety of our filters to match your application, including dual-element, sent-dry, out-bath and Cyclone Air Cleaner with inner-vent carbanetor. "Inner-vent" carbanetors are now available on specific models with dual-element filters.

Honda's inner-vent curbarear places the float lend tent on the "clean side" of the air filter elements of that the airfuel ratio remains more constant as the elements become duty. This allows the length of the service interval for air filter maintenance to be tune than doubled.



Reduction Units

The 2-to-1 reduction unit is chain or year driven and may include an automatic, centrifugally operated clutch. Clutch engagement oversis at 1800 spin and clutch lock occurs at 2200. The 6-to-1 year reducts in is year driven and does not include a clutch.



X:	Series	Vert	ical St	naft I	Engine Specifications							
HDESCHOLA CH	MOSTL	Ĕ	*DINIE*	वा साम	CELINATALITY PTO	10P COLENID SPTED-NO 1040	RICON STARTER	NUTALIZATION	HENSISTON C 'NO	AIR CLLLINES	122, 144K (QT.)	SC WILDER
2.5	EXVSO		VAZ	1	PUZZ X 17 TAPER MG X 1_76	4800				3.0	.5	1.2
8.8	PERSON.	KL	NO.	A SECTION	37M X 29-1 100. (collect fig 34 UMF	3600				DE	2.01	25
-	DRIVED	R3.	A3(1)		3430 H 7/8-1 DIA, TAPPED 40 24 UNF	3600				DE	2.01	40
11	GEVS48	H.Z	DEES	-	34s X I DIA. TAPPED 1 20 UNF	3606			بالنجحا	DE	2.2	72
	62V340	101	Def #21			3600	F-05-111	1007	100	DE	WINT	73
13	GEV390	KL	DASS	1.	34s X 1 DIA. TAPPED Tox 20 URF	3800	-	196		DE	W/G	73
	DEVESO	ELS	DEX	k		1970		-	1	DE	2.3	71

Specifications

GX Senes Horizontal Shaft Engine Specifications

					TE.	2.0	560	1.85						
2.8	CICHSO		QXA	1	240 X 50 DIA. TAPPED 4A 28 UNF			7900	200			80	1.27	12
2	DELECT	RJF	1000		21for X fo DUL TAPPED to 28 LINE	PARE!		4000		100.00		Diff	1.20	23
4	0.R3.20*	TA	DAR		2704 X 49 DIA, TAPPED 436 24 UNF			3900				08	2.64	.21
	88320	TA	3.3E.J	100	The state of the s	-		2900		-		30	2.84	26
	GX3.20	TI	6600					3900				CT	2.64	30
	033.20	77.	Lighten					2900				10	2.84	29
	88320	TI	HICE	1	2464 X 54 DSA.	- 2		2900				DE	2.64	28
	CELLED	71	132	10.0	3 CAS IS NOT THREADED			3900				DE	2.84	25
68.1	BEX180	72	QA2		2746 X IN DIA. TAPPED IN 24 UNF			2900	-			DB	3.88	24
	OKTOD.	71	The state of	30				3900				DE	2.88	34
-	0.8140	TI.	- Indian	-		-	-	3900	1 china			DE	3.68	MA.
	CX180	71				-	-	3400				CY	3.88	34
-	0.2160	1.1	VICE	-	2414.1 2 In DIA. TAPER IA PER FT	-		3900		-	-	DE	3.88	33
		n_	TAX		25M X Se THREADED	-	-	2000		-	-	DE	3.84	33
	GX160	71	RIC	-	24/13 X 22 MINI TAPPED MB & 1.28	-	-	1900		-	-	DE	3.88	45
	UKJAG	T1	2000		2 Van X for DAL YAPPED 450 24 UNIF	-	-	3900		-		DE	1.88	28.5
-	OX160	11	LX2		24st X 20 MM DIA, TAPPED MS X 1.2	-		3900	-		-	DE	1.68	36
Physical Property of	UK160-	71	HOUSE		2564 X 56 (III)	-	-	2900		-		DE	3.88	29
200	0.1200	71	OX2	-	2738 X 49 DIA, YAPPED 418 24 UNS	-	-	3900	-			DE	3.8	36
	01200	71	HAZZ		Strings & the CALL	-		2900	-	-	-	DE	2.8	41.3
Second Second	EX200	TI.	THZ VIEZ		25th A 22 MM ON, TAPPED MS X 1.2 25th X to DIA, TAPPER TAN PER PE	-	-	3900		-		DE	3.0	46
	G1200	TI	VAZ		July X de Dia, Taper Plan Per FT	+		3600	-	-		DE	3.0	26
10071	0.8340*	RA.	100		3 ²¹ da X 1 DIA, TAPPED Via 20 DW	-	-	3900	100	- 4		DE	M	100
-	Q.E.340	FL1	GAES	4	3 ³³ 44 K 1 DIA, TAPPED ⁷ 24 20 UNF	-	-	3900	-	-	-	30	6.4	83
	62348	K1	- 100		2-yes & 2 DISC TAPPED VIS 20 UND	-		2900		- 73	-	CY	10/A	84
	61240	K1	ORCH	-	3 ²⁴ ne X 1 DIA, TAPPED 20 UNF	-		3900		-	-	CT	8.4	14
1	BE240*	HI	HAS		Pho X I DIA.	1-1	-	2900	1	-		DE	84	100
	G1240	X1	LHZ		21364 X 28 ROM TAPPED MR X 1.25	-		3900			-	16	8.4	11
	OFEED	Ki	PAZ		35e R 1 BUL 14 NF 1000	+	-	3800				DE	8.4	14
	0.8340	K1	BAZ		2400 # 23 MM TAPPED MS X 1.28	-		3900			-	DE	8.4	62
1	03340	E3.	VA2	. 1	41 las X 22.2 MM TUPER SIA" PER FT	-		3900			10.	DE	B.A	M
1.0	BX370*	1	QAZ	-	3744 X 1 DIA, TAPPED to 24 UNF			3900				DE	8.4	54
25	83270		-					2900		10.1		DE	8.4	82
	0.8270	200	gace					3900				di	84	14
100	GX270*	1	1652	. 1	3402 Z 3 DIA.	(Jac)		3800			1	DE	8.4	13
	QX270	4	RAZ		2 ¹³ 6+ X 22 MM TAPPED MS X 1.28			3900				It	-4	205
1	0.0370		PAZ		340 X 1 DIA. LA NE THREADED			2900				DE	8.4	84
	0.0270	4	VAZ	1	41466 X 22.2 MM TAPER 214 PER FT			3900	A			DE	8.4	86
11	G1340*	H1			3 MAN X S DIA. TAPPED TO 34 SH LINF			2200	-A-			DE	6.0	68
	GX340	Z.N	DALE		The second secon			3900				DE	6.9	78
	63340	KS			the state of the s			2000.				CY	6.9	78
	GX340	R.S.	QNE2(2)		13.5			2900				DE	8.9	78
1	0X340	M1	VAS	*	41164 X In TAPER 254" PER FT			2900	100			30	8.9	80
	GX340	9.	VXEZ					3900			1	DE	8.9	TB
	6X340*	RJ.	HAZ	+	3492 X S. DAL	1.		3900	EC.			DE	8.5	78
	0.X340	79	LX2		Time X 28 MM TAPPED M8 X 1.21	-		3900	7			DE	4.0	99
2.3	CX380+	EX	GAZ		MAN X 1 DIA, TAPPED 1 24 URF	-		2900				DE	6.9	95.
No.	GX290	K1	ques	4		-		3900	2	-		CT	4.5	00
Sele-	03290	KI	CSAD	100			1	2900		-		DE	5.0	76
-	0.X300	K1	GWESTS	-		_	-	2900		180		DE	0.9	78
	OCXDO	KI.	VAZ		41464 II 22.3 MM TAPER 254" PER FT	-		2900		-		DE	1.1	8.0
-	DREKO	KL	VXE2			_		3800	-	-		DE	8.9	78
-	G1230	KA	HAT	压力率	THOME I DIA	-	-	3900	-	-	-	M	8.0	78
	GX390	KS	LAZ	100	274 X 25 MM TAPPED MS X 1.25	-	-	2900	-	_		DE	6.5	77

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GX Series Commercial Grade GX160



Click to enlarge

Features

- Honda OHV Commercial-grade engine
- Horizontal shaft
- · Electronic Ignition/Oll Alert
- · EPA/CARB compliant
- 2 Year Commercial Warranty

Applications: Air compressors, Generators, Pumps Pressure washers, Reel-type lawn mowers, Go-Karts, Agricultural equipment, Chipper/Shredders, Small construction equipment. Concrete saws

View Specifications View Performance Curve

Specifications

Englise Type Air-cooled, 4 Stroke, OHV, single cylinder

Bore x Stroke 68 x 45 mm (2.7 x 1.8 in)

Displacement 163 cm3 (9.9 au in)

Compression Ratio 8.5:1

Net Horse Power Sutput* 3.6kW (4.8HP) at 3,600 rpm

Net Torque 10.3 Nm (7.6 lbs ft) at 2,500 rpm

PTO Shaft Rotation Counterclockwise (from PTO shaft side)

Ignition System Transistorized magneto Ignition

Starting System Recoil or Electric Starter

G≅ Series Commercial Grade

OHV Horizontal Shaft

GXH50 GX100 GX120 GX160

GX200 GX240 GX270

GX340

GX390 OHV Vertical Shaft GXV50

GXV160 GXV340 **GXV390**

V-Twin

OHV Herizontal Shaft GX610 GX620

GX670

V-Twin OHV Vertical Shaft GXV530

GXV610 GXV620 GXV670 IGX Series HGX440

GC/GS Series Premium Residential

OHC Horizontal Shaft

GC160 GC190 G5190

OHC Vertical Shaft GCV160

GCV190 **GSV190**

Mini 4-Stroke

GX25 GX35 Carburetor Horizontal type butterfly valve

Lubrication System Forced Splash

Governor System Centrifugal Mechanical

Air Cleaner Dual Element Type (opt Cyclene type)

Of Capacity 0.6 ((0.63 US qt, 0.53 Imp qt)

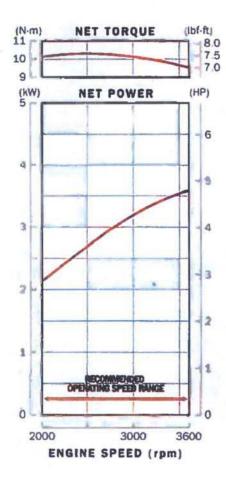
Fuel Tank Capacity (liter) 3.11 (3.3 US qt)

Dimensions (L x W x H) 305mm (12.0 in) x 341mm (13.4 in) x 318mm (12.5 in)

Dry Weight 13.0 kg (28.7 lbs)

Performance Curve

^{*} The power rating of the engine indicated in this document is the net power output tested on a production engine for the engine model and measured in accordance with SAE 11349 at 3600 rpm (7000 rpm for model GHX50). Mass production engines may vary from this value. Actual power output for the engine installed in the final machine will vary depending on flumerous factors, including the operating speed of the engine in application, environmental conditions, maintenance and fither variables.



GX160

Exhibit G Small Engine Warehouse Website

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7.75HP Briggs Snow Intek 3/4" Shaft, Electric Start Free Shipping Now Only \$249.95



8hp Kawasaki Electric Start Fits John Deere Gators FREE SHIPPING List Price \$896 NOW \$425 00



20hp Briggs Vanguard OHV Electric Start, Vertical Shaft Retails for \$1249 Now \$699 - Free Shipping



18hp Briggs Intek OHV Electric Start - Oli Filter Normal List Price \$986 Now \$469 - Free Shipping



26HP Kawasaki Vertical ES Liquid Coolad, 1-1/8" Shaft List Price \$2,175 Now Only \$1,200

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Exhibit H

U.S. Design Patent No. 282,071

United States Patent [19]

Nakamura

[11] Patent Number: Des. 282,071 [45] Date of Patent: ** Jan. 7, 1986

[54]	INTERNA	L COMBUSTION ENGINE	OTHER PUBLICATIONS				
[75]	Inventor:	Tetsuo Nakamura, Saitama, Japan	Implement & Tractor, 2-21-79, p. 37, Kawasaki En-				
[73]	Assignee: Honda Giken Kogyo Kabushiki Kalsha, Tokyo, Japan		gine. Implement & Tractor, 3-21-79, p. 11, Kawasaki Engine.				
[**]	Term:	14 Years	Primary Examiner-Wallace R. Burke				
[21]	Appl. No.:	478,941	Assistant Examiner—Lynn Wilder Attorney, Agent, or Firm—Sughrue, Mion, Zinn,				
[22]	Filed:	Mar, 25, 1983	Macpeak & Seas				
[30]	Foreign	Application Priority Data	[57] CLAIM				
	L 20, 1982 [JI	P] Japan	The ornamental design for an internal combustion en gine, as shown.				
[58]	Field of Sea	arch D15/1; 123/56 B, 56 BC,	DESCRIPTION				
	123/56	BA, 41.66, 41.67, 41.7, 195 G, 195 B, 195 R, 198 E	FIG. 1 is a front, top and left side perspective view of an internal combustion engine showing my new design;				
[56]		References Cited	FIG. 2 is a left side elevational view thereof; FIG. 3 is a front elevational view thereof;				
	U.S. I	PATENT DOCUMENTS	FIG. 4 is a rear elevational view thereof;				
	1. (m) 1 (m) (m) (m)	1978 Stevens	FIG. 5 is a top plan view thereof;				
	. 257,844 1/1	1981 Stevens	FIG. 6 is a right side elevational view thereof; and FIG. 7 is a bottom plan view thereof.				

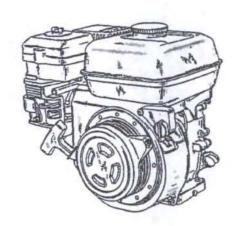


FIG. 1

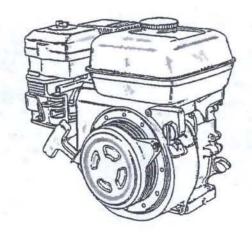


FIG. 2

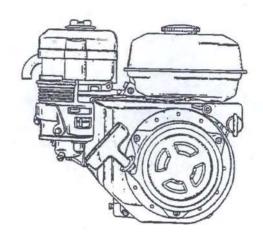


FIG. 3

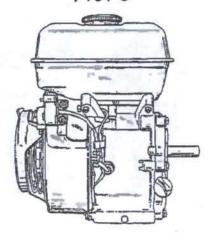


FIG. 4

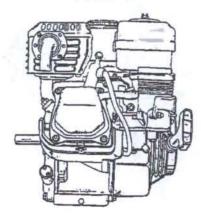


FIG. 5

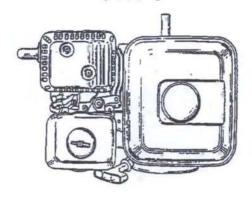


FIG. 6

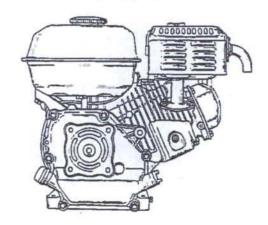


FIG. 7

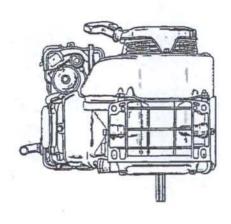


Exhibit 1

U.S. Patent No. 4,813,385

United States Patent [19]

Yamaguchi et al.

[11] Patent Number:

4,813,385

[45] Date of Patent:

Mar. 21, 1989

[54] GENERAL-PURPOSE INTERNAL COMBUSTION ENGINE

- [75] Inventors: Yoshinobu Yamaguchi; Mutsumi Terasawa, both of Saltama; Mitsuo Sasagase, Shizuoka, all of Japan
- [73] Assignces: Houda Giken Kogyo Kabushiki Kaisha, Tokyo, Toyuroki Selzo Co., Ltd., Shizuoka, both of Japan
- [21] Appl. No.: 143,299
- [22] Filed: Jan. 11, 1988

Related U.S. Application Data

[63] Continuation of Ser. No. 793,410, Oct. 31, 1985, aban-Foreign Application Priority Deta

Nov. 1, 198	4 [JP] Japan	59-230915
Nov. 1, 198	4 [JP] Japan	. 59-230916
Nov. 1, 198		59-230917
Nov. I, 198		59-165832[U]
Nov. 1, 198		59-165833(U)
Nov. 1, 198-		59-165834[U]
[52] U.S. C	f Search	P02B 65/00 123/2; 55/320 123/2, 195 C, 193 C; A, 1 B; 55/317, 318, 320, 337
10000		and the second s

[30]

References Cited U.S. PATENT DOCUMENTS

3,521,726	7/1970	Freya 123/198 E
		Knochler 55/31 E
4,013,105	3/1977	Wuskallio 123/198 E
4,276,067	6/1981	Lindmas 55/337
4,610,229	9/1986	Wissmann et al 2/169

FOREIGN PATENT DOCUMENTS

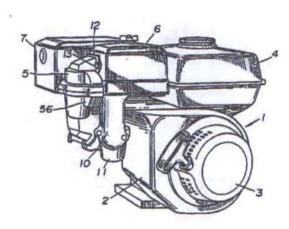
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2399200	3/1979	France .
2524551	10/1983	France .
2534626	4/1984	France .
27-5504	7/1952	Japan .
54-20689	7/1979	Japan .
56-50126	11/1981	Jupan .
57-61155	4/1982	Japan .

Primary Examiner—Tony M. Argenbright
Assistant Examiner—Eric R. Carlberg
Attorney, Agent, or Firm—Armstrong, Nikaido,
Marmelstein & Kubovcik

ABSTRACT

A general-purpose internal combustion engine com-prises an engine unit, a recoil starter, a fuel tank dis-posed on the engine unit, a main air cleaner disposed on the engine unit and coupled with a precleaner, and a muffler disposed on the engine unit. The main air cleaner and the muffler are disposed laterally of the fuel tank in parallel relation to each other, the main air cleaner being located closely to the recoil starter, and the muffler being disposed remotely from the recoil starter. The precleaner has an air inlet member disposed remotely from the muffler and positioned without projecting out of a plane containing a side of the main air cleaner which is remote from the muffler. The precleaner has an air outlet and the main air cleaner has a case with an air inlet defined in a side thereof and a substantially cylindrical filter housed centrally in the case coaxially with the vertical axis thereof. The air inlet has a central axis sidewardly offset a distance from a horizontal axis of the case and connected to the air

6 Claims, 4 Drawing Sheets



U.S. Patent Mar. 21, 1989

Sheet 1 of 4 4,813,385

FIG.1

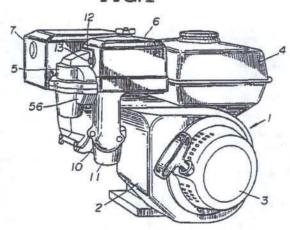
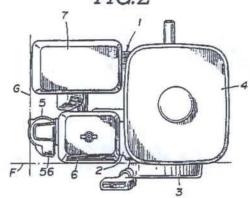
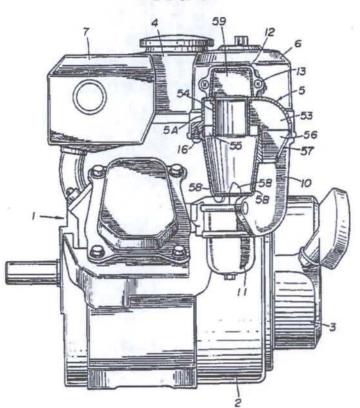


FIG.2



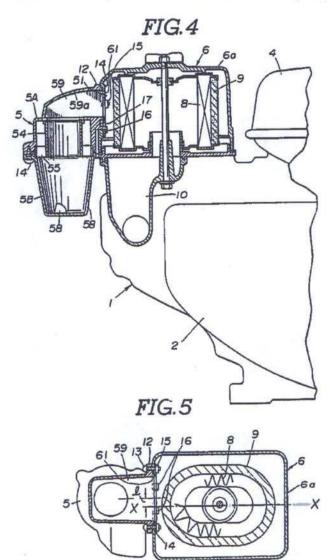


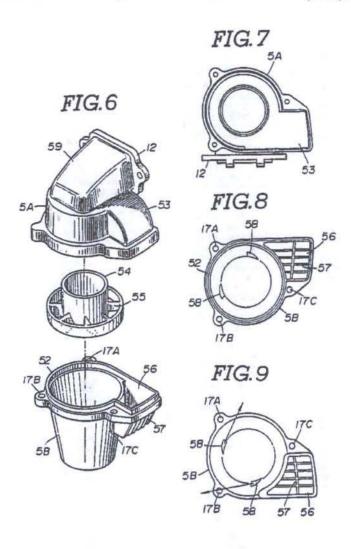


U.S. Patent Mar. 21, 1989

Sheet 3 of 4

4,813,385





This application is a continuation of application Scr. 5 No. 793,410 filed Oct. 31, 1985, now abandoned.

BACKGROUND OF THE INVENTION

The present invention relates to a general-purpose internal combustion engine for use as a prime mover in 10 various machines for agricultural, civil construction, and other uses and in various portable machines such as electric generators and pumps, and more particularly to such a general-purpose internal combustion engine having an air cleaner with a precleaner.

Internal combustion engines for use as prime movers in various machines for agricultural, civil construction, and other uses and in various portable machines such as electric generators and pumps, are often used in dusty places. Therefore, the filters in the air cleaners of such internal combustion engines are liable to get clogged soon, and have to be frequently cleaned or replaced, to avoid this shortcoming, there have been proposed general-purpose internal combustion engines as disclosed in Japanese Utility Model Publication Nos. 27-5504 and 54-20689, for example. The disclosed internal combustion engines have a main air cleaner employing a filter of paper and/or urethase foam and a cyclone-type precleaner positioned laterally of the main air cleaner. Dust-laden air is first introduced into the precleaner which removes most of the dust from the air. The air from the precleaner is then introduced into the main air cleaner through a port defined in a side thereof.

With the conventional air cleaner arrangements, however, the precleaner is simply connected to the air inlet port of the main air cleaner. The prior air cleaner structures have failed to meet the following require-

(a) The precleaser should not project out of the assembly of an engine, a fuel tank, a muffler, and an air cleaner, so that the precleaner would not impair the appearance of the engine assembly, would not obstruct the operation of a recoil starter, or would be damaged by being hit by an object;

(b) The precleaner should be located so as not to draw air heated by a heating body such as a muffler;

(c) The main air cleaner and the precleaner should should be interconnected by a joint duct having a small resistance to the flow of air therethrough;

 (d) The precleaner should be structured so that it could easily be formed;

(e) The precleaser should be arranged so that dust discharged therefrom would not be drawn through its own air inlet port into the precleaser; and

(f) The joint between the precleaner and the main air

cleaner should be durable.

The filter of the main air cleaner is oval or generally cylindrical in shape and housed centrally coaxially in an air cleaner case having a complementary shape. The 60 filtered air discharged from the precleaner is introduced into the main air cleaner case toward the vertical axis thereof and impinges substantially perpendicularly upon the outer circumferential surface of the oval or cylindrical filter, with the result that the filter portion 65 hit by the filtered air tends to get clogged soon. Therefore, the entire circumferential surface of the filter is not effectively utilized, and it is uneconomical to clean or

replace the entire filter when the other filter portion is not appreciably clogged.

The present invention has been made in an attempt to meet the aforesaid requirements of the general-purpose internal combustion engines and also to solve the above problem of the conventional air cleaner combined with the cyclone-type precienter.

SUMMARY OF THE INVENTION

It is an object of the present invention to provide a general-purpose internal combustion engine having a precleaner attached to a main air cleaner so that the precleaner will not impair the appearance of the engine assembly, will not obstruct the operation of a recoil starter, and will not be damaged by being hit by an object, the precleaner being located so as not to introduce air heated by a heating body such as a muffler.

Another object of the present invention is to provide a general-purpose internal combustion engine having a main air cleaner and a precleaner which are interconnected by a joint duct having a small resistance to the flow of air therethrough.

Still another object of the present invention is to provide a general-purpose internal combustion engine 5 having a precleaner structured so that it could easily be formed:

A still further object of the present invention is to provide a general-purpose internal combustion engine having a precleaser arranged so that dust discharged therefrom will not be drawn through its own air inlet port into the precleaser.

A yet still further object of the present invention is to provide a general-purpose internal combustion engine having a precleaner and a main air cleaner which are interconnected by a durable joint.

Still another object of the present invention is to increase the cleaning or replacement interval and the air purifying efficiency of the filter in an air cleaner having a cyclone-type precleaner.

According to the present invention, there is provided a general-purpose internal combustion engine comprising an engine unit, a recoil starter disposed parallel to the engine unit, a fuel tank disposed on the engine unit, a main air cleaner and a muffler disposed on the engine unit laterally of the fuel tank in parallel relation to each other, the main air cleaner being located closely to the recoil starter, the muffler being disposed remotely from the recoil starter, and a precleaner connected to the main air cleaner and having an air inlet member disposed remotely from the muffler an positioned without projecting out of a plane containing a side of the main air cleaner which is remote from the muffler.

The precleaner comprises an upper cleaner cases and a lower dust pan which are detachably coupled to each 55 other, the upper cleaner case having an air inlet duct projecting isterally and having a lower open end, the dust pan having the air inlet member which projects laterally and opens upwardly, the air inlet member defining an air inlet port directed substantially downwardly, the cleaner case and the dust pan being coupled together with the air inlet duct and the air inlet member held in registry with each other. Each of the cleaner case and the dust pan is substantially cylindrical in shape, the air inlet duct and the air inlet member projecting tangentirally from the cleaner case and the dust pan, respectively, the dust pan having a dust outlet hole defined in a bottom thereof and opening away from the air inlet port.

The precleaner has an integral air duct at its upper portion, the air duct having an air outlet at an outer end thereof, the main air cleaner having an air inlet defined in a side thereof and connected to the air outlet, the air duct having an upper surface curved progressively upwardly toward the air outlet.

The air duct of the precleaner has a flange surroun ing the air outlet, the air outlet and the air inlet being coupled by the flange, the precleaner engaging the main air cleaner at a position below the air outlet and the air

inlet which are coupled to each other.

According to the present invention, there is also provided an air cleaner comprising a cyclon-type pre-cleaner having an air outlet, and a main air cleaner including a case having an air jolet defined in a side thereof and a substantially cylindrical filter housed centrally in the case coaxially with the vertical axis thereof, the air inlet having a central axis sidewardly offset a distance from an axis of the case and connected to the air outlet of the precleaner.

The above and further objects, details and advantages of the present invention will become apparent from the following description of a preferred embodiment thereof, when read in conjunction with the accompany-

ing drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a perspective view of a general-purpose internal combustion engine according to the present

FIG. 2 is a plan view of the general-purpose internal

combustion engine;

FIG. 3 is an enlarged front elevational view of the general-purpose internal combustion engine, with a preclemer shown in vertical cross section

PIG 4 is an enlarged fragmentary side elevational view of the general-purpose internal combustion en-gine, with the precleaner and a main air cleaner in vertical cross section;

FIG. 5 is a horizontal cross-sectional view of the 40

main air cleaner and the precleaner; FIG. 6 is an exploded perspective view of the pre-

FIG. 7 is a bottom view of a precleaner case;

FIG. 8 is a plan view of a dust pan; and FIG. 9 is a bottom view of the dust pan.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

As shown in FIGS. 1 and 2, a general-purpose inter- 50 nal combustion engine includes an engine unit I having an air guide cover 2 disposed on one side thereof in covering relation to an engine cooling fan integral with a flywheel. A recoil starter 3 is attached to the outer surface of the air guide cover 2 in parallel relation to the 55 engine unit 1.

A fuel tank 4 is disposed on the upper surface of the engine unit 1 at one side thereof. A main air cleaner 6 coupled with a cyclone-type precleaner 5 and a muffler 7 are disposed interally of the fuel tank 4 parallel to each 60 other, the main air cleaner 6 and the precleaner 5 being located closely to the recoil starter 3. Each of the fuel tank 4, the main air cleaner 6, and the muffler 7 is substantially rectangularly shaped when viewed in plan.

As illustrated in FIGS. 4 and 5, the main air cleaner 6 65 ccommodates a substantially cylindrical or elliptical filter centrally in a cleaner case 6a coaxially with the vertical axis thereof, the cylindrical or oval filter com-

prising a paper filter member 8 and a urethane foam member 9 surrounding the paper filter member 8. The cylindrical or oval filter has an inner space communicating through an air duct 10 with a carburetor 11 (FIGS. I and 3).

As shown in FIG. 5, the main oir cleaner 6 has an air inlet 61 defined in a side thereof and having a central axis aldewardly displaced or offset a distance 1 from a horizontal axis X—X of the cleaner case 6a, and the precleaner 5 has an air outlet 51 defined by the outer end of an air duct 59 thereof. The precleaner 5 is at-tached to the main air cleaner 6 by a flange 12 surrounding the air outlet 51 with the air inlet 61 and the air outlet 51 held in registry with each other. As shown in FIG. 4 and 5, bolts 13 extend through the flange 12 threadedly into nuts 15 on a patch plate 14 disposed in the main air cleaner 6 and held against the inner side thereof in surrounding relation to the air inlet port 61. The precleaner 5 has a pair of hooks 16 (FIGS, 4 and 5) cting into the main air cleaner 6 below the air outlet 51 and the air inlet 61 and held in engagement with a case of the main air cleaner 6 and an edge of a hole 17 defined in the patch plate 14. The precleaner 5 may have a horizontally elongate single hook rather 25 than the pair of hooks 16.

As illustrated in FIG. 6, the precleaner 6 comprises an upper cleaner case 5A substantially in the form of a hollow cylinder, and a lower dust pan 5B substantially in the form of a hollow cylinder. The upper cleaner case 30 5A and the lower dust pan 5B are fitted together through a socket and spigot joint 52 (FIG. 6) and fas-tened together by a plurality of screws 16. (FIGS. 3 and

The air duct 59 is integral with the upper cleaner case
35 SA and has an upper surface 59a which is gradually
ourved progressively upwardly toward the main air

The upper cleaner case 5A has an integral air inlet duct S3 projecting tangentially outwardly and opening downwardy. An air guide sleeve 54 with a plurality of revolving guide blades 55 integrally formed therearound is removably fitted centrally in the upper cleaner case 5A.

The lower dust pan 5B has an integral air inlet mem-45 ber projecting laterally outwardly tangentially therefrom and opening upwardly. The air inlet member defines an an air inlet port 56 held in registry with the open end of the air inlet duct 53. The air inlet port 56 cens obliquely downwardly remotely from the muffler

7 through a grid 57.

The air inlet duct 53 and the air inlet port 56 are joined through a socket and spigot joint contiguous to the socket and spigot joint 52. The dust pan 5B has a plurality of dust outlet holes 58 defined in the bottom thereof along its peripheral edge. The dust outlet holes 58 are directed away from the air inlet hole 56 so that dust discharged from the dust outlet holes 58 will not be directed toward the air lalet hole 56 as indicated by the arrows in FIG. 9.

The dust pan 5B have screw holes 17A, 17B, 17c which are spaced at irregular intervals so that the air inlet port 56 and the dust outlet holes 58 will properly be positioned with respect to each other when the cleaner case 5A and the dust pan 5B are coupled by screws through the screw holes 17A, 17B, 17C.

With the cyclone-type precleaner 5 mounted on the main air cleaner 6, the air inlet port 56 of the precleaner 5 is positioned remotely from the muffler 7 as shown in

tially rectangular space as seen in plan. When the engine operates, dust-laden air is intro-duced through the air inlet port 56 into the precleaner 5 10 and caused to revolve by the tangential duct 53 and the revolving guide blades \$5. Dust of a large specific gravity such as sand particles drops along the inner wall surface of the dust pan 5B and is discharged out of the dust pan 5B through the dust outlet holes 5B. Air from 15 which most dust has been removed is drawn upwardly through the central air guide sleeve 54 and then through the duct 59 and the ports 51, 61 into the main air cles 6, in which the air is purified by the filter members 8, 9. Since the air inlet 61 of the main air cleaner 6 having a 20 central axis sidewardly offset the distance I of the borizontal axis X - X thereof, the air having entered the main air cleaner 6 is caused to flow along the inner peripheral surface of the cleaner case 6a. Therefore, dust can be removed form the air by the cyclonic ac- 25 tion, and the air can be filtered through the entire cir-cumference of the filter. Thus, the filter is prevented from being locally clogged with dust. The interval for cleaning or replacing the filter is increased, and the air purifying efficiency of the filter is also increased. The 30

filter is accordingly economical in use.

Although there has been described what is at present considered to be the preferred embodiment of the present invention, it will be understood that the invention may be embodied in other specific forms without de- 35 parting from the spirit or essential characteristics thereof. The present embodiment is therefore to be considered in all aspects as illustrative, and not restrictive. The scope of the invention is indicated by the appended claims rather than by the foregoing descrip-

We claim:

1. A general-purpose internal combustion engine comprising:

an engine unit having a crank case and a cylinder; a recoil starter disposed adjacent and coaxially with respect to said engine unit;

a fuel tank disposed over said crank case; a main air cleaner and a muffler disposed on said engine unit laterally of said fuel tank in parallel 50

relation to each other, said main air cleaner being located closely to said recoil starter, said muffler being disposed remotely from said recoil starter and above said cylinder;

precleaner connected to said main air cleaner and having an air inles member disposed remotely from said muffler, said precleaner comprising an upper cleaner case and a lower dust pan which are de-tachably coupled to each other, said upper cleaner case having an air inlet duct projecting laterally and having a lower open end, said dust pan having said air inlet member which projects laterally and opens upwardly, said sir inlet member defining an air inlet port directed substantially downwardly, said cleaner case and said dust pan being coupled to-gether, with said air inlet duct and said air inlet ember held in registry with each other.

 A general-purpose internal combustion engine coording to claim 1, wherein each of said fuel tank. said muffler, and said main air cleaner is substantially rectangularly shaped as viewed in plan.

 A general-purpose internal combustion engine according to claim 1, wherein said air inlet duct and said air inlet member project tangentially from said cleaner case and said dust pan, respectively, said dust pan hav-ing a dust outlet hole defined in a bottom thereof and

opening away from said air inlet port.

4. A general-purpose internal combustion engine according to claim 1, wherein said precleaner has an integral air duct at its upper portion, said air duct having an air outlet at an outer end thereof, said main air cleaner having an air inlet defined in a side thereof and connected to said air outlet, said air duct having an upper surface curved progressively upwardly toward said air outlet.

5. A general-purpose internal combustion engine according to claim 1, wherein said air duct of said precleaner has a flange surrounding said air outlet, said air outlet and said air inlet being coupled by said flange, said precleaner engaging said main air cleaner at a posi-tion below said air outlet and said air inlet which are coupled to each other.

 A general-purpose internal combustion engine
 according to claim I, wherein said main sir cleaner has an oval filter disposed centrally therein in alignment with a vertical axis thereof, said air inlet having a central axis sidewardly offset a distance from a horizontal axis of said warm air cleaner.



EXHIBIT
91200832 (Parent)
Applicant 43
Mieritz 8/26/2015

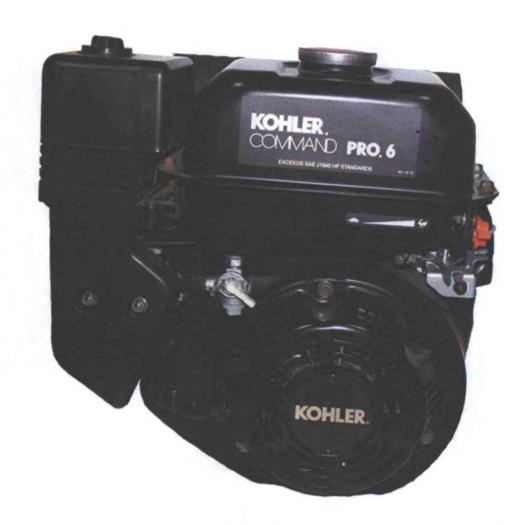


EXHIBIT
91200832 (Parent)

Applicant 44
Mieritz 8/26/2015

Honda GX

Alternative Fan Cover Designs



Briggs INTEK



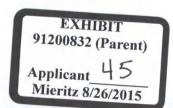
Kohler Command Pro (Old Design)



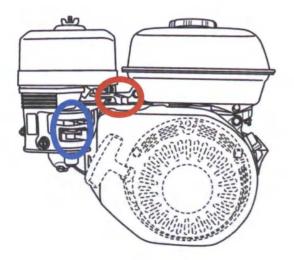
Kawasaki



Subaru EX 17



Honda GX Controls



Alternative Control Locations



Briggs INTEK



Kohler Command Pro (New Design)

EXHIBIT
91200832 (Parent)

Applicant 46
Mieritz 8/26/2015

Honda GX Complementary Angles

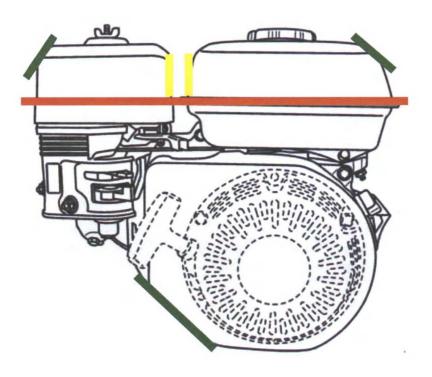


EXHIBIT 91200832 (Parent)

Applicant 47
Mieritz 8/26/2015

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

))
)) Opposition No. 91200832 (parent)
) Opposition No. 91200146) Application Serial No. 78924545
)))
)
)))

EXPERT REPORT OF JAMES MIERITZ

I. <u>INTRODUCTION</u>

1. I have been retained by Honda Giken Kogyo Kabushiki Kaisha ("Honda") to provide expert testimony regarding among other things: (1) the process required to design a small gasoline engine such as the Honda GX series engines; and (2) the nonfunctional features that give the Honda GX series engine that is the subject of the trademark application at issue in the above-entitled proceedings its unique, distinctive appearance as shown in Exhibit A.

II. QUALIFICATIONS

2. I have approximately forty years of experience working in the gasoline engine industry. From 1970 to 2006, I worked for Briggs & Stratton, one of the largest manufacturers of small gasoline engines in the world and a competitor of Honda in this market. I began my career at Briggs & Stratton as an engineer and draftsman for gasoline engines. Over the years, I achieved

91200832 (Parent)
Applicant
Mieritz 8/26/2015

EXHIBIT C

Materials Considered

AHGXC000434
AHGXC000648-652
AHGXC000658-671
Engine: Honda GX 120
Engine: Honda GX 160
Engine: Honda GX 200
Engine: Honda GX 240
Engine: Honda GX 270
Engine: Honda GX 340
Engine: Honda GX 390
Engine: Kohler Command Pro 6
Engine: Kohler Command Pro 7
Engine: Kohler Courage (SH265)
Engine: Briggs & Stratton Intek Pro 206
Engine: Briggs & Strattong Intek Pro 305
Engine: Briggs & Stratton 550 Series
Engine: Briggs & Stratton 750 Series
Engine: Briggs & Stratton 900 Series
Engine: Briggs & Stratton 1150 Series
Engine: Briggs & Stratton 1450 Series
Engine: Briggs & Stratton 1450 Series low profile
Engine: Briggs & Stratton 1600 Series
Engine: Briggs & Stratton 2100 Series
Engine: Vanguard 13hp
Engine: Vanguard 9hp
Engine: Vanguard 7.5hp
Engine: Vanguard 6hp
Engine: Vanguard 2.4hp
Engine: Subaru Robin EX 17

Engine: Subaru Robin EX 21

Engine: Subaru Robin EX 35

Engine: Kawasaki FE170

Engine: Kawasaki FE250

Letter of Protest Concerning Application

Serial No. 78/924545

September 2, 2008 Office Action Concerning Application Serial No.

78/924545

March 4, 2009 Response to September 2, 2008 Office Action Concerning Application Serial No. 78/924545

February 5, 2010 Office Action Concerning Application Serial No. 78/924545

August 4, 2010 Response to February 5, 2010 Office Action Application Serial No. 78/924545

August 26, 2010 Office Action Concerning Application Serial No. 78/924545

Declaration of James Mieritz in Support of Application Serial No. 78/924545

Declaration of Kevin Hoag in Support of Application Serial No. 78/924545

U.S. Patent and Trademark Office Official Gazette, January 25, 2011, TM381

Kohler Co.'s Notice of Opposition, No. 91200146, Filed May 25, 2011

Briggs and Stratton Corporation's Notice of Opposition, No. 91200832, Filed July 22, 2012

Opposers' Motion for Leave to File Amended Notices of Opposition, Opposition No. 91200832 (parent), Dkt. No. 11

Motion for Leave to File Summary Judgment Motion Regarding Functionality of Applicant's Claimed Engine Configuration, Opposition No. 91200832 (parent), Dkt. No. 21 Deposition of Scott Connor, Vol. I, August 9, 2012

Deposition of Scott Connor Vol. II, August 10, 2012

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

BRIGGS & STRATTON CORPORATION) and KOHLER CO.,	
Opposers,	Opposition No. 91200832 (parent)
v.)	opposition (10.)120002 (pureus)
· · · · · · · · · · · · · · · · · · ·	Opposition No. 91200146
HONDA GIKEN KOGYO KABUSHIKI)	
KAISHA,	Application Serial No. 78924545
)	
Applicant.	
)	
,	
)	
)	
+	

REBUTTAL EXPERT REPORT OF JAMES MIERITZ

I. <u>INTRODUCTION</u>

- I previously submitted an expert report on behalf of Applicant Honda Giken
 Kogyo Kabushiki Kaisha ("Honda") on September 28, 2012.
- I have reviewed the Report of Professor John R. Reisel submitted on behalf of Opposers Briggs and Stratton Corporation and Kohler Co. on September 28, 2012 (the "Reisel Report"). This rebuttal report addresses the opinions and underlying support included in the Reisel Report.

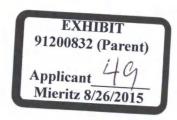


Exhibit A

Materials Considered

U.S. Patent No. 7,086,389

AHGX0036198-0036202 (January 19, 2007 Letter from Stetina Law Firm to WilmerHale)

AHGX0051631-0051641 (April 6, 2007 Letter from Stetina Law Firm to WilmerHale)

Engine Photo (in Reisel Report): Subaru SP170

Engine Photo (in Reisel Report): Predator 346cc

Engine Photo (in Reisel Report): Lifan 420cc

Engine Photo (in Reisel Report): Champion Model No. 61151

Engine Photo (in Reisel Report): Kawasaki FJ180

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE BEFORE THE TRADEMARK TRIAL AND APPEAL BOARD

BRIGGS & STRATTON CORPORATION) and KOHLER CO.,	
Opposers,)	Opposition No. 91200832 (parent)
v.)	Opposition No. 91200146
HONDA GIKEN KOGYO KABUSHIKI) KAISHA,)	Application Serial No. 78924545
Applicant.)	ATTORNEYS' EYES ONLY—SUBJECT TO PROTECTIVE ORDER
)	

SUPPLEMENTAL EXPERT REPORT OF JAMES MIERITZ

I. INTRODUCTION

- I have been retained by Honda Giken Kogyo Kabushiki Kaisha ("Honda") to provide expert testimony in the above-entitled proceedings.
- 2. I previously submitted the Expert Report of James Mieritz on September 28, 2012, and the Rebuttal Expert Report of James Mieritz on November 21, 2012. This supplemental report is being submitted in light of information and documents that became available after I submitted my expert reports including: the Rebuttal Expert Report of John R. Reisel submitted on behalf of Opposers Briggs and Stratton Corporation and Kohler Co. on November 21, 2012 (the "Reisel Rebuttal Report"), submissions and filings to the Trademark



EXHIBIT AADDITIONAL MATERIALS CONSIDERED

AHGXC000434-442	DC00006907-6911
AHGXC000531-533	Kohler003576-3613
AHGXC000546-563	Kohler029333-29368
AHGXC000630-633	Kohler030447-30452
AHGX0006514-6516	Kohler050542-50568
AHGX0080138-80142	Kohler051789-51801
AHGX0081653-81657	Kohler055532-55536
AHGX0100733-100739	Kohler060543
AHGX0100771-100775	Kohler060781-60786
AHGX0100935-100941	Kohler060788-60801
AHGX0100942-100952	Kohler060879-60880
AHGX0101299	Kohler060925-60926
AHGX0101301-101304	Kohler061093-61095
AHGX0101477-101499	Kohler061113-61116
AHGX0101518-101537	Kohler061391-61394
AHGX0102040-102049	Kohler061555-61557
AHGX0102050-102052	Kohler061562
AHGX0102053	Kohler061573-61592
BASCO0000167-172	Kohler061606-061613
BASCO0002800-2809	Deposition of John Lally, February 26, 2014
BASCO0002892-2899	Deposition of Michael Rudolph
BASCO0002904	February 27, 2014
BASCO0002916-2917	Deposition of Cameron Litt
BASCO00011250-11258	March 19, 2014
BASCO00011398	Deposition of Peter Hotz, March 26, 2014
BROOK000019	Deposition of Jeffrey Whitmore
DC00000091-106	March 27, 2014
DC00003912-3929	Deposition of Manuel Rumao,
DC00004210-4222	March 28, 2014
DC00004294-4296	Deposition of Yukio Sugimoto,
DC00004398-4400	May 29, 2014
DC00006900-6905	Deposition of Motohiro Fujita, December 10, 2014

Deposition of Motohiro Fujita, December 12, 2014

Exhibit 188-A to Deposition of Motohiro Fujita, December 12, 2014

Exhibit 189-A to Deposition of Motohiro Fujita, December 12, 2014

Brief in Support of Opposers' Motion for Summary Judgment [Unredacted Version Filed Under Seal], Opposition No. 91200832 (parent), Dkt. No. 48

Applicant's Memorandum in Support of Its Motion to Deny or Continue Opposers Briggs & Stratton Corporation and Kohler Co.'s Motion for Summary Judgment Pursuant to Rule 56(d) [Unredacted Version Filed Under Seal], Opposition No. 91200832 (parent), Dkt. No. 59

Applicant's Opposition to Opposers Briggs & Stratton Corporation and Kohler Co.'s Motion for Summary Judgment [Unredacted Version Filed Under Seal], Opposition No. 91200832 (parent), Dkt. No. 77Declaration of Sarah Frazier in Support of Applicant's Opposition to Opposers Briggs & Stratton Corporation and Kohler Co.'s Motion for Summary Judgment and Exhibits [Unredacted Version Filed Under Seal], Opposition No. 91200832 (parent), Dkt. No. 78

Reply Brief in Support of Opposers' Motion for Summary Judgment, Opposition No. 91200832 (parent), Dkt. No. 84

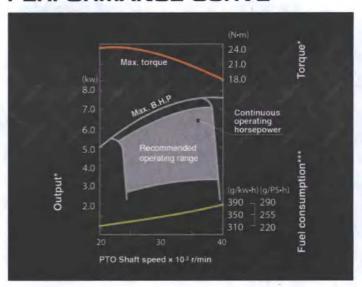
Stipulation for Admission of Foreign Publications and Applications and Exhibits, Opposition No. 91200832 (parent), Dkt. No. 105

Board Order Denying Opposers' Motion for Summary Judgment, Opposition No. 91200832 (parent), Dkt. No. 88

MZ360



PERFORMANCE CURVE

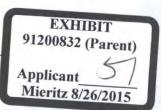


SPECIFICATIONS

Model Name	MZ360	MZ360 Reduction Type
Bore x Stroke	85 x 63 mm	85 x 63 mm
Displacement	357 cc	357 cc
Compression Ratio	8.1:1	8.1:1
Max Power (Net)*	7.6 NM (10.2 hp) @ 3600 rpm	7.6 NM (10.2 hp) @ 1800 rpm
Rated Power (Net)*	6.3 kW (8.4 hp) @ 3600 rpm	6.3 kW (8.4 hp) @ 1800 rpm
Max Torque (Net)*	23.9 Nm (17.6 ft-lbf) @ 2400 rpm	47.8 Nm (35.3 ft-lbf) @ 2400 rpm
Fuel	Unleaded Gasoline	Unleaded Gasoline
Fuel Tank Capacity	6.7 L (1.8 gal)	6.1 L (1.61 gal)
Ignition System	T.C.I.	T.C.I.
Spark Plug	NGK BPR4ES	NGK BPR4ES
Lubrication System	Mechanical Splashing	Mechanical Splashing
Oil Capacity	1.1 L (1.2 qt)	1.1 L (1.2 qt)
Dry Weight	33Kg (73.8 lb)	36Kg (79.4 lb)
Dimensions (L**xWxH)	424.5 x 451 x 481 mm	450 x 451 x 481 mm

^{*} Net horsepower and torque are measured on a production engine with the factory-installed air cleaner and muffler using Yamaha-developed test standards. Actual power output of a particular engine can vary due to manufacturing tolerance differences, as well as numerous factors such as ambient operating conditions, how the engine is maintained, the type of equipment being powered, and variances in the installation, including the intake and exhaust systems, fuel delivery, and engine cooling.

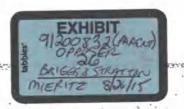
^{***} Fuel consumption estimates are based on Yamaha testing of a production engine with the factory installed air cleaner and muffler. Actual fuel consumption will vary due to the same factors that can affect engine power as well as the operating speed in the application and other variables.



^{**} Length dimension with Type A PTO.



EXHIBIT
91200832 (Parent)
Applicant 53
Mieritz 8/26/2015



⑲ 日本国特許庁(JP)

①実用新案出願公告

⑩実用新案公報(Y2)

昭63 - 32344

MInt Cl. 4

識別記号

庁内整理番号:

❷❷公告 昭和63年(1988)8月29日

.F 02 B. 67/00

Z - 6624 - 3G

(全4頁)

の考案の名称 ·汎用内燃機関

前置審査に係属中

创出

到実 · 願 昭57-53279 開 . 昭58-156123

昭57(1982) 4月13日 22出

- ③昭58(1983)10月18日

70% 山 山 埼玉県新座市野火止8-12-30-318

四考 案 者 小鹿野 . 武·雄 埼玉県川越市岸町2-29-26

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弁理士 福田 勧 何代 理 X

窘 杳 官 熊沢

実開 昭56-66031 (J-P, U) 60参考文献

実公 - 昭38--15601 (IP. Y1)

昭47-24184 (J·P, Y1)

の実用新案登録請求の範囲

シリンダを水平よりやや上に傾け、吸排気弁の 配置を頭上弁式とした汎用内燃機関において、吸 排気弁を略水平に支持すると共に、ヘッドカバー をシリンダヘッドに対し略水平方向に着脱可能に 5 備え、燃料タンクをクランクケースとシリンダの 上方に配置してそのクランクケースとシリンダに 支持させ、キャブレータをシリンダへツドの一側 に配置してシリンダヘッドの吸気口と接続すると 共に、シリンダヘツドより上でエアクリーナをキ 10 ト・吸排気弁・ピストンリング・シリンダ・点火 ヤブレータの上方に配置してキャブレータと接続 し、同じくシリンダヘッドより上でエアクリーナ と反対側にマフラを配置してシリンダへツドの排 気口と接続することによって、シリンダヘッドお を左右に振分けて配置し、上記燃料タンクとエア クリーナとマフラの各上面を略そろえると共に、 クランクケースのクランク軸突出面を含む垂直面 と、その反対側のフアンカバーの外側面を含む垂 直面との間に上記燃料タンク・キャブレータ・エ 20 するもので、図面に示すようにクランクケース1 アクリーナ及びマフラを略位置させた汎用内燃機

考案の詳細な説明

本考案は農作業、土木作業その他各種作業の動 力源として使用される汎用内燃機関に関する。こ 25 リンダヘッド3の頂面に点火ブラグ6をシリンダ の種の内燃機関は小型・軽量であるばかりでな

く、多様な使用目的に対応できるように、例えば 機関本体部分は共通でも、例えばクランクシャフ ト、エアクリーナ、マフラなどは用途に合つたも のを備え、又使用環境・条件等の相違から生じる 機関各部分の維持手入れが容易であることも必要 である。具体的な定期点検項目としては、潤滑油 の点検・補給・交換、エアクリーナ・点火プラ グ・燃料タンク・ストレーナ・コンタクトプレー ・カ・キャブレータ・燃焼室等の清掃、及びタベツ 時期等の交換調整がある。

本考案は汎用内燃機関において必要な上記の要 件を略満足できる内燃機関を得ることを目的とす

- よびヘッドカバーより上でエアクリーナとマフラ 15 汎用内燃機関において、シリンダを水平よりや や上に傾けることにより機関全体の高さを低くし て小型化と使用時の安定を図ったものがある。本 考案も上記シリンダが傾斜している型式で且つ吸 排気弁の配置が頭上弁式の汎用内燃機関を基体と
 - とシリンダ2は一体に形成され、シリンダ2は水 平よりやや上に傾斜している。そのシリンダ2の 上端面を覆つたシリンダヘッド3の頂面に吸気弁 4と排気弁5を並べて略水平に支持し、又上記シ
 - 傾斜角度と略平行の方向に取付けている。そして

吸排気弁用ロッカアーム7を覆うヘッドカバー8 を、シリンダヘッド3に対し略水平方向に着脱で きるように備えている。ヘッドカバー8は図に省・ 略したボルトによって固着される。

燃料タンク9をクランクケース1とシリンダ2 の上方に配置し、ステー10(タンク下半面保護 板を兼用している)を介してクランクケース1と シリンダ2にそれぞれポルト11で固着して支持 している。

2をシリンダヘッド3の一側に配置してシリンダ ヘッド3の吸気口3Aに連設し、シリンダヘッド 3より上でそのキャブレータ12の上方にエアク リーナ13を配置してキャブレータ12と連設し ている。実施例は、エアクリーナ13とエルボ形 15 吸気管14を一体に形成し、その吸気管14をエ アクリーナ取付ステーに兼用している。又その吸 気管14をキャブレータ12に固着するポルト1 5を延長してシリンダへッド3にねじ込むことに よりキャプレータ12とエアクリーナ13を共締 20 め固着しているが、キャブレータ12及びエアクト リーナ13の取付け構造に限定はない。

そしてシリングヘッド3より上でエアクリーナ 13と反対側にマフラ16を配置してシリンダへ ツド3の排気口3Bに排気管17を介して連設し25 ている。

・図中1.8 はピストン、19はクランク軸、20 はカム軸、21はタベット、22はブッシュロッ ド、23はフアンカバー、2.4はクランクケース カバーを示す。 1914: Wit.

上記燃料タンク9とエアクリーナ13とマフラ 16の各上面は、略同じ高さにもるのでいる。又 クランクケース 1のクランク軸突出面 (クランク ・ケースカバー2.4の外側面)を含む垂直面と、そ -の反対側のファンカバー2 3 の外側面を含む垂直 35 のクランク軸突出面を含む垂直面と、その反対側 面との間に、上記燃料タンク9・キャブレータ1 2 * エアクリーナ13及びマフラ16を略位置さ せている。

・点火プラグ6の清掃交換の際の着脱を容易にす るために、第2図に示すようにエアクリーナ13 とマフラ16の間を若干空けておくを可とする。 エアクリーナ13は、油を含浸させたウレタン

フォームを濾過材13Aに用い、下面開口13B から肌気オス機造で出る へいドカパーロープリ

ーザチャンパ25が設けられ、そのチャンパ25 はチューブ2.6でエアクリーナ1.3に連結されて

従つてクランク室 1 Aは通路 2 7・ロッカアー ム室8A・ブリーザチャンパ25・チューブ2·6 を経てエアクリーナ13に連通する。28はブリ ーザバルブ、2.9, 30は油戻し穴である。

本考案汎用内燃機関は上記のように、水平より やや上に傾いているシリンダ2・シリンダヘッド 第2図・第3図に示すように、キャブレータ1 10 3に対し、ヘッドカバー8を略水平方向に着脱で きるようにしたから、ヘッドカバー8を外すのみ でタペツト部が現れ、吸排気弁4,5が水平に支 持されているから、タベット部の間隙は上下方向 を向いていてタベット調整が容易である。またシ リンダ2・シリンダヘッド3・ヘッドカバー8を 上記のように配置したことにより、吸排気弁4. 5を始めとしてブリーザバルブ28。点火プラグ 6・キャプレータ12等がシリンダへツド側の側 面に集中し、それらの部品の調整点検が容易であ る。 燃料タンク9は、一体に形成されているク ラングケース1とシリンダ2にのみ支持させたか ら、他部品例えばシリンダヘッド3、キャプレー タ12等を清掃等のために取外すとき、タンク9 まで外す必要がなくて迅速容易に着脱できる。

> キャブレータ12及びマフラ16は、シリンダ ヘッド3の両側にそれぞれ配置し、エアクリーナ 13はキヤブレータ1.2の上方に配置したから、 それらの部品12, 13, 16は互いに干渉する ことなく個々に着脱できて、前記各部の保守点検 30 作業を容易にする効果がある。

燃料タンク9は前配のようにクランクケース1 こと傾斜しているシリンダ2の上方に、エアクリー ナ13及びマフラ16はシリンダへツド3の上方 にそれぞれ配置して、それらをクランクケース1 のフアンカバー23の外側面を含む垂直面との間 に略収まるように位置させたから、クランクケー ス1・シリンダ2・シリンダヘツド3・ヘッドカ パー8の上方に、燃料タンク9 * エアクリーナ1 3・マフラ16を可能な限り太きな容積スペース を保つて設置することができ、又燃料タンク9・ エアクリーナ13+マフラ16の3部品をコンパ クトに配置できてデザイン的にも良好である。

実公 昭 63-32344

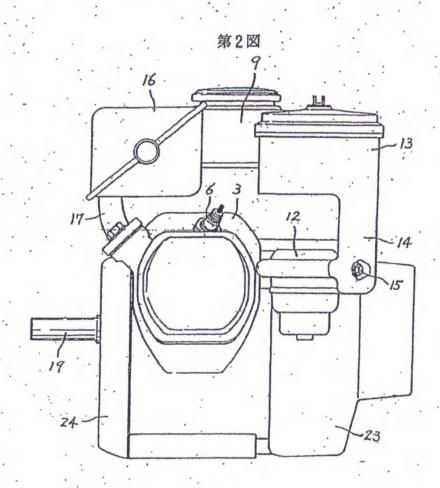
5

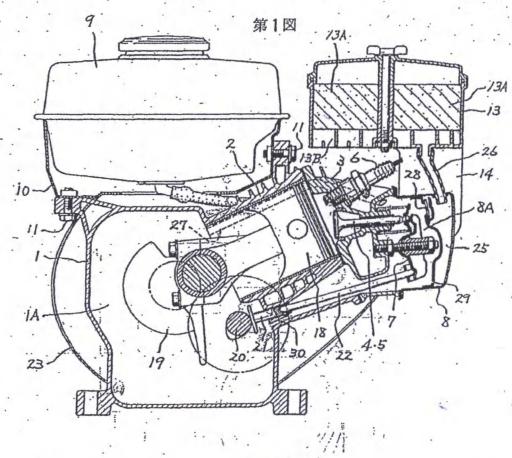
図面の簡単な説明

第1図は本考案内燃機関の縦断正面図、第2図 は側面図、第3図は一部横断平面図。

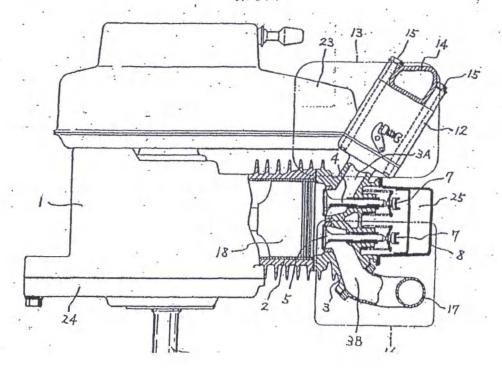
1はクランクケース、2はシリンダ、3はシリンダへツド、4は吸気弁、5は排気弁、6は点火 5

ブラグ、7はロツカアーム、8はヘッドカバー、9は燃料タンク、12はキャブレータ、13はエアクリーナ、14は吸気管、16はマフラ、17は排気管、18はピストン、19はクランク軸。





第3図



(19) Patent Office of Japan (JP)

(12) Official Gazette for Examined UM Application Publication (Y2) (11) Examined Utility Model Application Publication No. S63-32344 (24)(44) Publication Date: August 29, 1988

(51) Int. Cl.⁴ F02B 67/00

ID No.

Internal Ref. No. Z-6624-3G

Total Number of Pages in the Original: 4

(54) Title of the Innovation: GENERAL-PURPOSE INTERNAL COMBUSTION ENGINE

(21) Application No. S57-53279	(65) Disclosure (Kokai) No. S58-156123
(22) Filing Date: April 13, 1982	(43) Disclosure Date: October 18, 1983
(72) Innovator: Yoshinobu YAMAGUCHI	8-12-30-318, Nobitome, Niiza-shi, Saitama Prefecture
(72) Innovator: Takeo OGANO	2-29-26, Kishi-machi, Kawagoe-shi, Saitama Prefecture
(71) Applicant: Honda Motor Co., Ltd.	2-1-1, Minami-Aoyama, Minato-ku, Tokyo
(74) Agent: Patent attorney, Takeshi FUKUDA	
Examiner: Mr. Kumazawa	

(56) References cited by the examiner: UM S56-66031 (JP, U); UM S38-15601 (JP, Y1); UM S47-24184 (JP, Y1)

(57) Claims:

A general-purpose internal combustion engine with a cylinder inclined slightly upward from the horizontal direction and with intake and exhaust valve system in an overhead arrangement, characterized in that said intake and exhaust valve system is supported in a substantially horizontal position, said engine further comprising: a head cover that is removably installed in a substantially horizontal position relative to said cylinder head; a fuel tank that is located above said crankcase and cylinder and is supported by said crankcase and cylinder; a carburetor located on one side of said cylinder head and is connected to a suction port of the cylinder head; an air cleaner located above said cylinder head and over said carburetor and is connected to the latter; a muffler that is also positioned above said cylinder head but on the side thereof opposite to said air cleaner and that is connected to an exhaust port of said cylinder head, whereby the air cleaner and the muffler are located above the cylinder head and the head cover and on the left and right sides thereof, respectively; the upper surfaces of the fuel tank, air cleaner, and muffler are arranged to be substantially flush with one another; and the fuel tank, carburetor, air cleaner, and muffler are arranged substantially between a vertical surface that includes a crankshaft protrusion surface of the crankcase and a vertical surface that includes an outer surface of a fan cover located on the opposite side.

Detailed Description of the Innovation

This model is related to general purpose internal combustion engines that are used as sources of power for agricultural work, civil engineering work, and other work of all kinds. Internal combustion engines of this kind are not only compact and lightweight, but also adaptable to a wide variety of applications. For example, such engines needs to have a common main body, but can be equipped with different crankshafts, air cleaners, mufflers, or other equipments suited to the particular use. Further, such engines needs to allow for easy maintenance and care of different engine parts as made necessary by different environments and conditions of use. Specific items for periodic inspection include: inspection, replenishing, and change of lubricants; cleaning of air cleaners, spark plugs, fuel tanks, strainers, contact breakers, carburetors, and combustion chambers; and replacement and adjustment of tappets, intake and exhaust valves, piston rings, cylinders, ignition timing, and so on.

The purpose of this model is to provide an internal combustion engine that fulfills the above requirements necessary for general purpose internal combustion engines.

There is a general purpose internal combustion engines in which the cylinder is tilted slightly upward from the horizontal direction to reduce the height of the engine, thereby downsizing the engine and stabilizing the engine during use. This model is also based on a general purpose internal combustion engine format that has cylinders angled in this way, and intake and exhaust valves in an overhead arrangement. As shown in the drawings, the crankcase 1 and cylinder 2 are formed as a single body, with the cylinder 2 angled slightly upward from the horizontal direction. The surface of the upper end of the cylinder 2 is covered by the top surface of the cylinder head 3, on which the intake valve 4 and exhaust valve 5 are located side by side and supported substantially horizontally, and on which the spark plug 6 is also attached at an angle that makes it substantially parallel to the angle of the cylinder. The head cover 8, which covers the rocker arm 7 for the intake and exhaust valves, is detachably connected in a substantially horizontal manner with respect to cylinder head 3. The head cover 8 is fixed in place by bolts that are omitted from the figure.

The fuel tank 9 is placed above the crankcase 1 and cylinder, and is fixed in place and supportedly connected by bolt 11 to the crankcase 1 and cylinder 2 through a stay 10 (which is also used as a protective plate over the surface of the bottom half of the tank).

As shown in Figs. 2 and 3, the carburetor 12, which is positioned to one side of the cylinder head 3, interconnects with intake port 3A on cylinder head 3, while the air cleaner 13, which is positioned over the carburetor 12 above the cylinder head 3, interconnects with the carburetor 12. An embodiment has the air cleaner

13 and elbow-shaped intake pipe 14 formed as a single body, and the intake pipe 14 is also used as an air cleaner mounting stay. The bolt 15 that fixes the intake pipe 14 in place onto the carburetor 12 is lengthened so that it screws into the cylinder head 3, thereby fastening both the carburetor 12 and the air cleaner 13 in place together, but this does not suggest any limitation on the mounting structure of the carburetor 12 and air cleaner 13.

The muffler 16, which is positioned above the cylinder head 3 and on the opposite side of the cylinder head 3 from the air cleaner 13, interconnects with the exhaust port 3B on the cylinder head 3 by means of an exhaust pipe 17.

Reference numeral 18 in the drawings indicates the piston, 19 the crankshaft, 20 the camshaft, 21 the tappet, 22 the pushrod, 23 the fan cover, and 24 the crankcase cover.

The upper surfaces of the fuel tank 9, air cleaner 13, and muffler 16 noted above are arranged at substantially the same height. The fuel tank 9, carburetor 12, air cleaner 13, and muffler 16 are positioned substantially between the vertical surface that includes the crankshaft protrusion surface (the outer surface of the crankcase cover 24) of the crankcase 1 and the vertical surface that includes the outer surface of the fan cover 23 located on the opposite side.

Some space can be left open between the air cleaner 13 and the muffler 16, as shown in Fig. 2, so that removal of the spark plug 6 for cleaning and replacement can be made easier.

The air cleaner 13 is constructed to utilize oil-soaked urethane foam as the filter material 13A and draw in air from the opening 13B on the lower surface of the air cleaner 13. The head cover 8 contains the breather chamber 25, which is coupled to the air cleaner 13 by means of the tube 26.

Consequently, the crankcase 1A is interconnected with the air cleaner 13 through the passage 27, rocker arm 8A, breather chamber 25, and tube 26. Reference numeral 28 designates the breather valve, while 29 and 30 are oil return ports.

This general purpose internal combustion engine model is made with the head cover 8 detachable in a substantially horizontal manner with respect to the cylinder 2 and cylinder head 3 that are angled somewhat upward from the horizontal direction, as described above. Therefore, the tappet area is revealed simply by removing the head cover 8, and because the intake and exhaust valves 4 and 5 are supported horizontally, the space in the tappet area extends in a vertical direction such that tappet adjustment is made easier. The arrangement of the cylinder 2, cylinder head 3, and head cover 8 as described above means that the intake and exhaust valves 4 and 5, as well as the breather valve 28, spark plug 6, carburetor 12 and other parts are clustered together on a side surface on the cylinder head such that adjustment and inspection of those

parts are made easier. The fuel tank 9 is supported only by the crankcase 1 and cylinder 2, which are formed as a single body, so that when other parts, such as the cylinder head 3 or the carburetor 12, are removed for cleaning or other purposes, it is not necessary to remove the tank 9, and those parts can be attached or detached fast and easily.

The carburetor 12 and muffler 16 are positioned on the respective sides of the cylinder head 3, and the air cleaner 13 is positioned above the carburetor 12. Therefore, those parts 12, 13, and 16 can be detached and installed without interfering with each other. This has the effect of making maintenance and inspection work on the above-mentioned parts easy.

The fuel tank 9 is positioned above the crankcase 1 and the inclined cylinder 2, as described above, and the air cleaner 13 and muffler 16 are both positioned above the cylinder head 3. They are positioned in such a way that they fit substantially between the vertical surface that includes the crankshaft protrusion surface of the crankcase 1 and the vertical surface that includes the outer surface of the fan cover 23 located on the opposite side. Thus, the fuel tank 9, air cleaner 13, and muffler 16 can be positioned in a space having a volume as large as possible above the crankcase 1, cylinder 2, cylinder head 3, and head cover 8. This is favorable from the design standpoint, since the aforementioned three parts (the fuel tank 9, air cleaner 13, and muffler 16) can be arranged compactly.

Brief description of the drawings

Fig. 1 is a front view in longitudinal cross-section of this internal combustion engine model. Fig. 2 is a side view, and Fig. 3 is a transverse partially sectional plan view.

1 is the crankcase, 2 the cylinder, 3 the cylinder head, 4 the intake valve, 5 the exhaust valve, 6 the spark plug, 7 the rocker arm, 8 the head cover, 9 the fuel tank, 12 the carburetor, 13 the air cleaner, 14 the intake pipe, 16 the muffler, 17 the exhaust pipe, 18 the piston, and 19 the crankshaft.



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⑪実用新案出願公告.

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200公告 昭和62年(1987) 8月31日

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(全3頁)

汎用エンジン 図考案の名称

> 昭57-144534 如実 顖

超59-47320

四出 昭57(1982)9月22日 @昭59(1984) 3月29日

砂考 案 者 信.

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AHPB 006875

砂実用新案登録請求の範囲

汎用エンジンのシリンダに対してファンカバー 側に気化器を設け、気化器から上方にエアクリー ナを設け、エアクリーナケースと一体のカバーを 気化器外方に臨ませるとともに、気化器のチョー 5 止を図った汎用エンジンを提供するにある。 クレバーをファンカバー側に臨ませ、眩チョーク レバーに隣接して燃料コツクレバーを設け、チョ ークレバー、コックレバーを前記カバーに設げた 長孔から外方に突出するようにしたことを特徴と する汎用エンジン。

考室の詳細な説明

本考案は汎用エンジンに係り、特に操作性を向 上せしめた改良に関するものである。

産業機械やレジャー用途の機械の動力源として ンジンの取り扱いは、燃料、オイルが充分である 場合には、コツクの操作、チョーク、スロツトル そしてリコイルスタータの操作で運転、停止迄の 操作が行われる。

コイルスタータに対してコツクが異る面に、更に チョークやスロットルが異る面に従来では設けら れ、従つて操作は異る面に設けられている各部品 を個々に操作する必要があり、始動時、停止時に 操作のし忘れや誤動作を生じる戯れがある。

本考案は以上に鑑みなされたもので、その目的 とする処は、汎用エンジンのシリングに対してフ アンカバー側に気化器を設け、気化器から上方に エアクリーナを設け、エアクリーナケースと一体

のカバーを気化器外方に臨ませるとともに、気化 器に設けたチョータレバーに隣接して燃料コック レバーを設け、これらレバーをガイドする長孔を ガバーに設ける如くし、操作性の向上、誤操作防

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次に本考案の好適一実施例を添付図面に従って 詳述する。

第1図は汎用エンジンの正面図、第2図は第1 図矢視2方向の図、第3図は横断平面図である。

汎用エンジン1はベース2上にクランクケース 3を搭載固定し、クランクケースの外周一側にシ リンダブロック4を斜め上方に突設し、シリンダ ブロツク4上にシリングヘツド5を設け、シリン ダヘッド5には本実施例では4サイクルエンジン 汎用エンジンが用いられているが、かかる汎用エ 15 であるため吸・排気弁6, 7を備える。クランク ケース3内にはクランクシャフト8が装架収納さ れ、これは既知の如くピストン9にコンロッド1 0を介して連結され、クランクシャフト8の一端 はクランスケース3の一面外方に突出して動力取 以上の運転、停止に係る機能部品は、例えばり 20 出部8aとし、クランクシャフト8の他端8hを クランクケース3の他面外方に突出し、これにフ イン11を備えて冷却ファンを兼ねるフライホイ ール12を固着し、フライホイール12の外周を フアンカバー13で覆い、フアンカバー13の内 25 部外方寄り部にリコイルスタータ機構14を設置 し、リコイルスタータノブ15はファンカバー1 3 外方部の周上に斜め上方に引き出し操作し得る 如く突出する。

エンジンの吸気ポート 16はシリンダヘッド5

のファンカバー13を有する側の斜め上方に延出 され、この上に気化器17を固着し、気化器17 の上にエアクリーナ18を配設し、第3図中18 aはエアクリーナ18の下部の取付部で取付部1 8aは気化器17、吸気ポート周辺のフランジ部 5 に突出し、開口部31,32にはチョーク、燃料 16 aに共通のボルト19で結着されている。排 気ポート20は吸気ポートの反対側に開口し、こ れに排気管21を介してマフラ22を連結し、マ フラ22はエアクリーナ、気化器の反対側に配設. され、フアンカバー13上の反対側のクランクケ 10 ク、コツクレバー等が同一の面に設けられ、従つ ース3上には燃料タンク23が設けられる。尚図 中24は吸・排気弁のステム等を覆うシリンダへ ツドカバーである。

以上において、気化器17にはスロットルレバ - 25、チョークレバー26を上下に備える如 15 ため、レバーのオン、オフ等を容易に確認させる· く、かかるレバー25, 26はファンカバー1.3 側に配設して外方に突出せしめ、下のチョークレ バー26の下方に隣接して燃料コックレバー27 を配設する。従つてリコイルスタータノブ15を 有する面にスロットルレバー25、チョークレバ 20 図矢視2方向図、第3図は同横断平面図である。 -26、燃料コックレバー27が配設されること となり、又燃料タンク下のファンカバー13側に. エンジンのストップスイッチ28を設け、このよ うに操作部を一面に配設する。

27が配設されるが、エアクリーナ18のケ

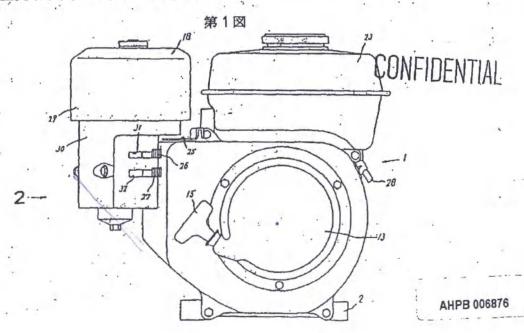
-ス29に下方に垂下するカバー30を設け、カ バー30は気化器17の周りを覆い、これに横長 の開口部 31, 32を設け、開口部 31, 32か らチョークレバー26、コツクレバー27を外方 コツクの旨を表示し、且つチョーク、コックの開 閉位置等を表示する。

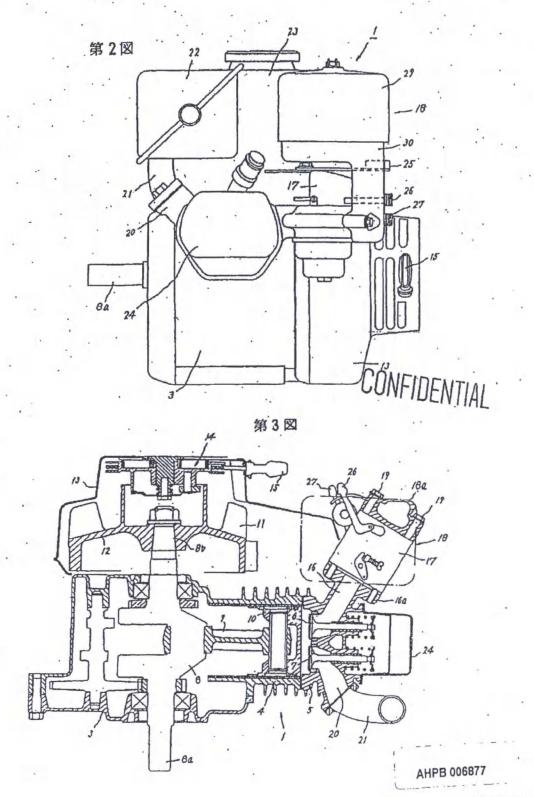
以上で明らかな如く本考案によれば、汎用エン ジンの操作系、即ちリコイルスタータ、チョー て操作のし忘れや誤操作を防止し、又個々の操作 も一面でなし得て操作の機能性を向上せしめ得る 他、チョークレバー、コックレバーをカバーの開 口から突出させ、これでガイドさせるようにした。 ことができ、誤動作を確実に防止することができ る等多大の利点を有する。

図面の簡単な説明

第1図は汎用エンジンの正面図、第2図は第1

尚図面中1はエンジン、4,5はシリンダ、1 3はファンガバー、17は気化器、18はエアク リーナ、26はチョークレバー、27は燃料コツ クレバー、29はエアクリーナケース、30はカ エアクリーナ18の下に前記レバー25,225パー、31,32は長孔である。





(19) Patent Office of Japan

(12) Official Gazette for Examined UM Application Publications (Y2) (11) Examined Utility Model Application Publication No. S62-33961 (24)(44) Publication Date; August 31, 1987

(51) Int. CI.⁴ F02B 67/00 F02D 11/02

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Total Number of Pages in the Original: 3

(54) Title of the Innovation: GENERAL-PURPOSE ENGINE

(21) Application No. S57-144534	(65) Disclosure (Kokal) No. S59-47320
(22) Filing Date: September 22, 1982	(43) Disclosure Date: March 29, 1984
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Examiner: Kei Hara	CONFIDEN

(57) Claims:

A general purpose engine comprising: a carburetor installed on a fan cover side relative to an engine cylinder; an air cleaner located above the carburetor; a cover made integrally with an air cleaner case disposed outside of and facing the carburetor; a choke lever of the carburetor disposed to face the fan cover; and a fuel valve lever arranged adjacent to said choke lever, wherein said choke lever and said valve lever protrude outward through long holes formed in said cover.

Detailed Description of the Innovation

This innovation relates to a general purpose engine, and more specifically, relates to improvements in the engine operability.

General purpose engines are used as power sources for machinery in the industrial and recreation fields. If fuel and oil are sufficient, operations of the valve, choke, throttle, and recoil starter are performed to start and stop general purpose engines.

An operator may forget to operate some of the controls during the start or stop operation, or may operate them incorrectly resulting in malfunctions. This is because the above-mentioned functional parts for the start and stop operations are required to be operated separately, however, for instance, the valve is

conventionally arranged in a different plane from that of the recoil starter, and the choke and the throttle are also conventionally arranged in different planes.

This innovation addresses the foregoing problem. The object of this innovation is to provide a general purpose engine of improved operability and to prevent wrong operation, wherein a carburetor is disposed on the fan cover side with respect to the cylinder of the general purpose engine, an air cleaner is disposed above the carburetor, a cover integrated with an air cleaner case is disposed outside of and facing the carburetor, a fuel valve lever is disposed adjacent to the choke lever installed on the carburetor, and long holes for guiding these levers are provided in the cover.

In the following description of the preferred embodiment, reference is made to the accompanying drawings.

Figure 1 shows the front view of a general purpose engine; Fig. 2 shows the view in the direction of arrow 2 in Fig. 1, and Fig. 3 shows a transverse sectional view.

The general purpose engine 1 comprises a crankcase 3 fixedly mounted on a base 2, a cylinder block 4 disposed on one side on the circumference of the crankcase to protrude at an angle in the upper direction, a cylinder head 5 mounted on the cylinder block 4 wherein intake and exhaust valves 6 and 7 are provided because of the four cycle engine in this embodiment. A crankshaft 8 is mounted within the crankcase 3 and connected to a piston 9 by a connecting rod 10 as generally known in the art, with one end of the crankshaft 8 outwardly protruding on one side of the crankcase 3 to form a power takeoff 8a, while the other end 8b of the crankshaft 8 outwardly protrudes on the other side of the crankcase 3 with a flywheel 12 serving also as a cooling fan with fins 11 fixed on the other end 8b; the fan cover 13 covers the circumference of the flywheel 12; a recoil starter mechanism 14 is installed inside the fan cover 13 and closer to the outside; a recoil starter knob 15 protrudes from the outer circumference of the fan cover 13 such that it can be pulled out in upward slanting direction and operated.

An intake port 16 of the engine extends obliquely upward from the cylinder head 5 on the side of the fan cover 13, and the carburetor 17 is fixed on the intake port 16; the air cleaner 18 is installed on the carburetor 17; part 18a of Fig. 3, which is a mounting part at the bottom of the air cleaner 18, is fastened to the carburetor 17 as well as to a flange 16a circumferentially arranged at the intake port with common bolts 19. An exhaust port 20 opens on the opposite side of the intake port and is connected through an exhaust pipe 21 to a muffler 22, which is installed on the opposite side of the air cleaner and carburetor; and a fuel tank 23 is installed on the crankcase 3 on the opposite side of the fan cover 13. Part 24 in the drawing is a cylinder head cover that covers stems, etc., of the intake and exhaust valves.

In the foregoing construction, the throttle lever 25 and choke lever 26 1 FITTI

vertically arranged on the carburetor 17, the said levers outwardly protruding on the side of the fan cover 13, and the fuel valve lever 27 is arranged under and adjacent to the choke lever 26. Thus, the throttle lever 25, the choke lever 26, the fuel valve lever 27 are arranged in a plane that includes the recoil starter knob 15, and a stop switch 28 is provided on the side of the fan cover 13 under the fuel tank, so that the controls are arranged on single plane.

The aforementioned levers 25, 26, and 27 are arranged under the air cleaner 18. The cover 30 is suspended downward from a case 29 of the air cleaner 18 and covers the circumference of the carburetor 17. Provided on the cover 30 are the laterally-long openings 31 and 32, through which the choke lever 26 and the fuel valve lever 27 protrude outward. The opening and closing positions, as well as the signs of the choke and fuel valve, are indicated near the openings 31 and 32 on the cover 30.

As is clear from the above explanations, this innovation offers distinct advantages. It prevents overlooked or wrong operations because the controls of the general purpose engine such as a recoil starter, choke and valve levers are installed on the same plane, thus improving functionality because individual operations can be completed on a single plane. It helps to easily confirm the ON and OFF positions of levers, since the choke lever and the valve lever protrude from the openings on the cover, serving as guides, thus reliably preventing wrong operations.

Brief description of the drawings FIDENTIAL

Figure 1 shows the front view of a general purpose engine, Fig. 2 shows a view in the direction of arrow 2 in Fig. 1, and Fig. 3 shows a transverse sectional view.

In the drawings, the number 1 represents the engine, 4 and 5 the cylinder, 13 the fan cover, 17 the carburetor, 18 the air cleaner, 26 the choke lever, 27 the fuel valve lever, 29 the air cleaner case, 30 the cover, and 31 and 32 represent long holes, respectively.



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⑫実用新案公報(Y

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識別記号

庁内斡理番号

200公告 昭和63年(1988) 9月19日

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G-7515-3G Q-7515-3G

(全2頁)

◎考案の名称

内燃機関の冷却装置

到实 昭57-158814 昭59-62226

20H 爾 昭57(1982)10月20日

母昭59(1984) 4 月24日

水 阳考 者 徳

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创出 井理士 福..田 创代 理 人

査

動実用新案登録請求の範囲

クランクケースの側面に取付けたファンカバー の下部を平に形成し、その平にしたことによって 減少したカパー内の導風通路の容積を補う空間を 上記ファンカバー内の下部側方に設けた内燃機関 の冷却装置。

考定の詳細な説明

本考案は内燃機関、特に強制空冷式の汎用内燃 機関の冷却装置に関する。

うにクランク軸1上のフライホイール2に機関冷 却用のフアン3を一体的に設け、クランクケース 4の側面に設けたフアンカバー5によつてシリン ダ 6 に冷却風を導く。7 は冷却風導入孔を示す。

パー5.との間の導風通路Wは、フアン3の回転方 向aに向つて除々に広くなるようにフアンカバー 5を図のようにスクロール状に形成するのが一般 である。

するために、シリンダ6をクランクケースの上方 に略乖直に立てた内燃機関に於て機関の取付面E 即ちクランクケース4の下面に対するクランク軸 ・1の高さを低くした場合、或はシリンダ6を垂直 せ若しくは略水平にした内燃機関にあっては、フ アンカバー5の下部5aを第1図鎖線示のように スクロール曲線にすることができない。

そこでフアンカバー5の下部5aを第1図実線 示のように平に形成することになり、その部分の 導風通路W 1 が小さくなつて冷却風の円滑な流れ を妨げ風量が減少して充分な冷却効果が得られな いという不具合がある。

本考案は上記の不具合を簡単な構成により解消 することを目的とするもので、上記フアンカバー 5の下部 5 a を平に形成し、その平にしたことに よつて減少した導風通路W1の容積を捕う空間S この種の内燃機関は例えば第1.2 図に示すよ 10 を上記フアンカバー5内の下部側方に設けたこと を特徴とする。

図示例はクランクケース4のフアンカパー5側 の壁面 4 a の下部にケース 4 内に突出する凹部 4 1を形成して、その凹部41内を上配の空間Sと この場合、上配冷却フアン3の周縁とフアンカ 15 したものである。ただしフアンカバー5に外方に 突出する凹部を形成する。或はフアンカバー5と 上記壁面4aの両方に形成することもある。

なお、図示例はシリンダ 6を略水平もしくはや や上向きに傾斜させた内燃機関に適用したが、シ ところが例えばこの種の内燃機関の高さを低く 20 リンダ 6 を略垂直に立てた内燃機関等にも適用で きる。

本考案は上記のようにフアンカバー5の下部5 a を平に形成し、その平にしたことによって減少 した導風通路W1の容積を補う空間Sを上記ファ 位置からフアン3の回転方向と反対方向に傾斜さ 25 ンカパー5内の下部側方に設けたから、フアンカ パー5内を流れる冷却風の一部は上配空間5を通 つて円滑に流れ、前配のように風量が減少するこ レがたく機関を効率とく冷却でキエスのでもエ

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なお、上記の空間Sを形成するための凹部41 を図示例のようにクランクケース4の下部に形成すると、その部分のクランクケース4の表面積が増大しそこを流れる冷却風によつてクランクケース4の下部に貯溜した潤滑油Oも効率よく冷却できる利点がある。この場合第3図に示すように上記凹部41内に冷却フィン41aを形成するとさらに効果的である。

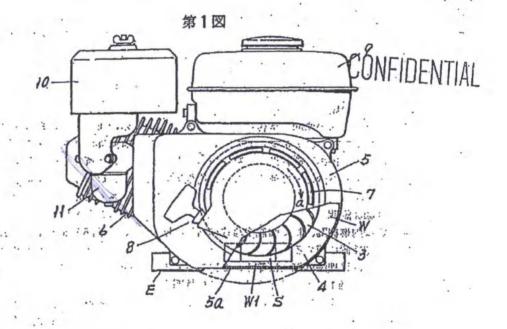
図中8はリコイルスタータ、9は燃料タンク、

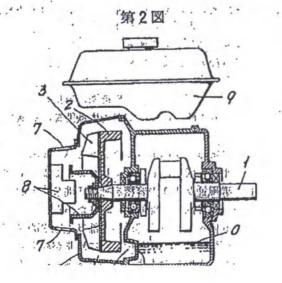
10はエアクリーナ、11はキャプレータを示す。

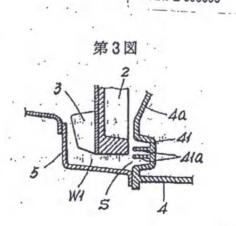
・図面の簡単な説明

増大しそこを流れる冷却風によつてクランクケー 第1図は本考案冷却装置を備えた汎用内燃機関ス4の下部に貯溜した潤滑油Oも効率よく冷却で 5 の正面図、第2図はその縦断側面図、第3図は変きる利点がある。この場合第3図に示すように上 形例の要部の断面図である。

1 はクランク軸、3 は冷却フアン、4 はクラン クケース、5 はフアンカバー、E は取付面、W, W1 は導風通路、S は空間。







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1. 8

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(54) Title of Innovation:

COOLING DEVICE FOR INTERNAL COMBUSTION ENGINE

(21) Application No.: \$57-158814

(65) Disclosure:

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(57) Claims

A cooling device for an internal combustion engine, in which the lower portion of a fan cover attached to a lateral side of a crankcase is made flat, with a space used for compensating flattening-induced reduction in the volume of the air duct within the cover provided in the bottom portion under the above-mentioned fan cover.

Detailed Description of the Innovation

The present innovation relates to a cooling device for an internal combustion engine, in particular, to a general-purpose internal combustion engine with forced air cooling.

As shown, for instance, in Figs. 1 and 2, in this type of internal combustion engine, an engine cooling fan 3 is provided integrally with a flywheel 2 mounted on a crankshaft 1 and cooling air is channeled to a cylinder 6 by a fan cover 5 provided on a lateral side of a crankcase 4. Key 7 designates an inlet for cooling air.

In such a case the fan cover 5 is typically formed in a scroll-like fashion, as shown in the figure, such that the air duct W between the periphery of the above-mentioned cooling fan 3 and the fan cover 5 gradually expands in the direction of rotation a of the fan 3.

Incidentally, for instance, when the helght of the crankshaft 1 with respect to the engine mounting surface E, i.e. the bottom face of the crankcase 4, is reduced in an internal combustion engine having a cylinder 6 installed near-vertically above the crankcase for the purpose of reducing the height of this type of internal combustion engine, or in an internal combustion engine, in which the cylinder 6 is tilted, or made almost horizontal, from the vertical position in the direction opposite to the direction of rotation of the fan 3, the bottom portion 5a of the fan cover 5, as shown with a dotted line in Fig. 1, cannot be imparted a scroll-like curved shape.

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Therefore, the bottom portion 5a of the fan cover 5 is made flat, as shown with a solid line in Fig. 1, as a result of which the air duct W in this portion is reduced in size, impeding the smooth flow of cooling air, and sufficient cooling effects cannot be obtained due to the amount of air being reduced.

The present innovation, whose object is to eliminate the above-described problem based on a simple construction, is characterized in that the bottom portion 5a of the above-mentioned fan cover 5 is rendered flat and a space S used for compensating the reduction in the volume of the air duct W1 due to the flattening is provided in the bottom portion under the above-mentioned fan cover 5.

In the example illustrated in the figures, a recessed portion 41 jutting out inside the case 4 is formed in the lower portion of the wall surface 4a of the crankcase 4 on the side of the fan cover 5, with the space inside the recessed portion 41 used as the above-described space S. And, in the fan cover 5, there is formed an outwardly protruding recessed portion [sic; - trans.]. Otherwise, it is formed both in the fan cover 5 and in the above-mentioned wall surface 4a.

In addition, although the example illustrated in the drawings describes application of the innovation to an internal combustion engine, in which the cylinder 6 is tilted nearly horizontally or slightly upwardly, the innovation can be also applied to internal combustion engines, in which the cylinder 6 is standing nearly upright.

In the present innovation, as described above, the bottom portion 5a of the fan cover 5 is rendered flat and a space S used for compensating the reduction in the volume of the air duct W1 due to the flattening is provided in the bottom portion under the above-mentioned fan cover 5, as a result of which some of the cooling air flowing under the fan cover 5 smoothly flows through the above-mentioned space S, such that the engine can be efficiently cooled without reduction in the amount of cooling air, as described above.

In addition, the innovation has the advantage that forming the recessed portion 41 used as the above-mentioned space S in the lower portion of the crankcase 4, as shown in the figure, leads to a corresponding increase in the surface area of the crankcase 4 and to more efficient cooling of lubricating oil O stored in the bottom portion of the crankcase 4 by the cooling air flowing therethrough. In such a case, as shown in Fig. 3, even higher efficiency can be achieved by providing cooling fins 41a inside the above-mentioned recessed portion 41.

In the figures, 8 is a recoil starter, 9 a fuel tank, 10 an air cleaner, and 11 a carburetor.

Brief Description of the Drawings

Fig. 1 is a front view of a general-purpose internal combustion engine equipped with the cooling device of the present innovation, Fig. 2 is a cross-sectional side view thereof, and Fig. 3 is a cross-sectional view of the main portion of a modified example.

//Kevs//

- Crankshaft.
- Cooling fan.
- Crankcase.
- Fan cover.
- Mounting surface.

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W, W1. Air ducts. Space.